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"Nec tibi quid liceat sed quid fecisse decebit

"Occurrat mentemque domat respectus honesti."—CLAUD.

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2. A practical Essay on the Disease generally known under the denomination of Delirium Tremens, &c. &c. By Andrew Blake, M.D. Surgeon to His Majesty's Seventh Regiment of Dragoon Guards.—8vo, sewed, pp. 68. March, 1830.

3. Practical Hints for the Development of the Human Mind. By Frederick Clissold, Esq. Octavo, stitched, pp. 66. London, Hatchard and Son. 1830. Price 2s.

4. The Influence of Climate in the Prevention and Cure of Chronic Diseases, more especially of the Chest and Digestive Organs, &c. &c. By James Clark, M.D. &c. Octavo, pp. 400. Second Edition, Enlarged. 1830.

*** This Edition is very greatly improved, and these improvements are and will be noticed in various parts of the Journal.

5. On Pulmonary Consumption and its Treatment. By James Jenkins, M.R.C.S. Octavo, sewed, pp. 46.

6. Medical Botany, No. XI. for April 1st, 1830. By Dr. Stephenson and Mr. Churchill.

*** This admirable work continues to support its reputation for fidelity of design and economy.

7. Report of the Royal Dispensary for Diseases of the Ear, Dean Street, Soho, from 1817 to 1830. By John Harrison Curtis, Esq. Octavo, 1830.

8. Address of Earl Stanhope, President of the Medico-Botanical Society, for the Anniversary Meeting, January 1830.

*** We are happy to see so learned a physician with the rank of Earl. We apprehend there were few of the Earl's medical auditors who could have delivered so learned a speech as that which lies before us.

9. A short Treatise on Operative Surgery, describing the principal Operations as they are practised in England and France; designed as a Manual for the Use of Students in operating on the Dead Body. By Charles Averill, Surgeon to the Cheltenham Casualty Hospital. Third Edition, considerably enlarged. Octavo, pp. 294, four plates. Jackson, London, 1830.

*** An improved edition of a valuable little work. We are happy to hear that a German translation is become a manual for students in Germany, and that an Italian Professor is about to make his countrymen acquainted with its merits in a similar manner.

10. A popular Description of the Aldinian Defensive Dresses, &c. for rescuing Life and Property from Injury or Destruction in cases of Fire. 8vo, stitched, pp. 24. London, 1830. Price 1s. 6d.

11. No. 31, for May 1st, 1830, of Flora Medica, &c. &c. Edited by a Member of the London College of Physicians, F.L.S. and assisted by several Members of a Botanical Society. Price 3s. London, Wilson, 1830.

*** We have already expressed a very favourable opinion of the early numbers of this useful Botanical Work, and we have seen no reason to change our sen-

timents concerning it. It is a very laudable attempt to improve the botanical and pharmaceutical knowledge of the members of the profession, and as such it has our hearty approval and recommendation.

12. Cholera, its Nature, Cause, and Treatment; with original Views, &c. in relation to Fever, &c.—By Charles Searle, Surgeon of the Hon. East India Company's Establishment. 8vo, pp. 254. Wilson, 1830.

13. A Letter to William Lawrence, Esq. on the Nature and Causes of Intellectual Life and Mind. By William Addison, M.D. Octavo, stitched, pp. 35.—London, 1830.

14. On the Diseases and Injuries of Arteries, with the Operations required for their Cure; being the substance of the Lectures delivered in the Theatre of the Royal College of Surgeons in the Spring of 1829. By G. J. Guthrie, F.R.S. &c. Octavo, pp. 416.—London, 1830.

*** See our present number.

15. Modern Medicine influenced by Morbid Anatomy, &c. By Leonard Stewart, M.D. &c.

*** This was an oration delivered before the Medical Society of London at the 57th Anniversary of that Society. It excited much satisfaction, and the author has now given it a wider diffusion among his brethren.

16. Some Observations on Fumigating, Vapour, and other Baths, with a Summary of Ninety-two important Cases treated at the Establishment in Great Marlborough. By Jonathan Green, M.R.C.S. Octavo, pp. 67. 1830.

17. A Practice of Physic, comprising most of the Diseases not treated of in "Diseases of Females," and "Diseases of Children;"—(other Works of the same Author.) By W. P. Dewees, M.D. &c. Two Vols. 8vo. Philadelphia, 1830.

*** Great talent is displayed in the original matter of these volumes, and much judgment in the compilation of the rest. We purpose to notice one or two articles very shortly.

18. Historical, Botanical, and Medicinal Description of Sarsaparilla, with Remarks on its Official Preparations. By B. Moxon, Chemist, Hull. Second Edition, enlarged, pp. 53. 1830.

*** Mr. Moxon prepares "a concentrated compound decoction of sarsaparilla," which we deem (from actual trial) to be a very excellent preparation of that valuable medicine. It is to be obtained at Butlers in Cheapside, and most other respectable houses in London.

19. Auli Cornelii Celsi de re Medica. Libri Octo. Editio Nova, ex Recensione Leo. Targae, curante C. F. Collier, M.D. Accedit Lexicon Celsianum Breve. In 4 vols. 18mo. Also,

20. A Translation of the Eight Books of Aulus Cornelius Celsus. From the text of Leo. Targae, with a brief explanatory Lexicon. By C. F. Collier, M.D. Included in the above four volumes.

*** The text, as far as we have been able to examine it, appears to be very correct, and the translation faithful. The edition is remarkably cheap, being only four shillings each volume.

21. A specimen of an Introduction to the Study of Anatomy. By James Paxton, M.R.C.S. &c. Octavo, stitched, pp. 16. Oxford.

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THE
Medico-Chirurgical Review,

No. XXV.

APRIL 1 to JULY 1, 1830.

I.

ON TEMPERAMENT.

PHYSIOLOGIE DES TEMPERAMENS OU CONSTITUTIONS ; NOUVELLE
DOCTRINE APPLICABLE A LA MÉDECINE-PRACTIQUE, &c. Par F.
Thomas, (de troisième) D.M.P. : à Paris.

[PRIZE REVIEW.]

IF great diversity of sentiment indicate great difficulty in the subject investigated, there are few points of a more abstruse and perplexing character than the theory of those physical varieties which obtain in different individuals of the human species. That a mechanism essentially the same wherever met with—in whatever quarter of the globe and among whatever people—could furnish such endless modifications of internal function and of external feature, was not to have been expected. Every face wears a physiognomy characteristically its own ; every mind presents qualities peculiar to itself. No similarity of circumstance can secure similarity of character. Individuals, born of the same parents and in the same house, suckled on the same breast and nursed on the same knee, educated by the same masters and subjected to the same authority, introduced to the world at the same period and moving in the same society—are different, frequently as different as the clumsy Japanese and the elegant Circassian are in body, or the ferocious Tartar and the harmless Hottentot in mind. Though all are generically alike, all are specifically dissimilar ; though all are cast into the same mould, all come out with distinguishing personalities. Beauty adorns one, deformity marks another ; judgment, or imagination forms the prominent quality of a third. Indolence and activity, talent and stupidity, passions the most headstrong and affections the most engaging, may thus be found growing out of the same soil, associating under the same roof, and peculiarizing individuals born and nurtured under the influence of the same circumstances.

How this is, and why this should be, are questions which have been more frequently asked than answered. If great differences appear between people separated from each other by great distances, the dissimilarity may not be inexplicable. If the Laplander, who is cradled in the storm, be unlike the Negro of Guinea, who is nursed in the sun-beam, it may not be deemed marvellous. Local peculiarities can accomplish, and have effected much ; and, although the cave of Trophonius lays claim to more miracles than our

faith can ascribe to it, the demonstration were not difficult which proved that variety of climate, of custom and of education has wrought mental and physical transformations, which some have rashly referred to original varieties of species. It is, however, vain and preposterous to stretch the agency of these modifying causes beyond a certain limit. To a certain limit their agency is undeniable; but those physiologists, who maintain that mere difference of external condition can explain every difference of corporeal and metaphysical character, betray sad embarrassment in many of their arguments.

When these constitutional peculiarities are understood in a general sense, they are denominated TEMPERAMENTS; when intended for individual application, they are styled IDIOSYNCRACIES. Temperament is the *genus*, idiosyncrasy the *species*; but since each individual is marked by some distinguishing quality, through which he is made to differ from every other, there must be as many temperaments as men, the history of constitutional peculiarities would be the history of every member of the human race, and, therefore, minuteness on a subject of such extent were as vain at it would be useless. Leading points of dissimilarity alone can be considered, as they only can furnish general results, and the tender pencilling of shadowy individualities must be left for the study of the Novelist, whose aim is less instruction than amusement.

The ancients ascribed much more importance than we do to the knowledge of temperaments; and in their treatment of disease generally followed them as their guide to the choice of remedies. Corresponding to their four elements,—fire, air, earth, and water, and to the four qualities ascribed to these,—heat, cold, dryness, and moisture, four varieties of constitution were discovered and described. The blood was viewed by many of them as the first vital principle, if not the life, to which every constitutional peculiarity was referred; and as it departed *en masse* or in its separate elements from what was supposed to be a state of health, the system was inferred to suffer in proportion. If its red particles abounded, the constitutional habit was *sanguine*; if the phlegm were in excess, the person was *phlegmatic*; and as the yellow, or the black bile preponderated, the *choleric* or *melancholic* *φύσις* prevailed. These four *εξαρτήσεις* of Hippocrates Galen multiplied to nine; but this augmentation seems to have been little better than a useless refinement, for, except the last or *temperamentum ad pondus*, those which were added can scarcely be regarded in any other light, than as new appellations, or mere explanations of the first. Cullen has with his usual ingenuity examined how far the constitution of the blood may modify that of the system, and after a minute consideration of the subject concludes that “with respect to its aggregation, or with respect to the state and proportion of the several parts which compose it as an aggregate, it seems not only to be uncertain how far these circumstances give a difference of temperament, but, on the contrary, it seems probable that they never do so in any considerable degree.

While the humoral pathology reigned, this theory of the ancients reigned along with it; and Stahl has with much address traced the connexion between the powers of mind and body in health and disease and the constitutional states of the animal fluids. When the system was phlegmatic the fluids were thin and unstimulating; when melancholic they were thick and inactive; when sanguine they were hot; when choleric they were acrid.

To assert that there is no truth in all this would be to say more than we are warranted, but it were not difficult to prove that it is not all true. If difference of constitutional temperament depend upon constitutional differences in the blood, it is natural to suppose that when a certain condition of this fluid obtains we should find a corresponding state of temperament; that when the blood appears thin and poor, the habit should be phlegmatic; when thick and rich, melancholic. The inverse of these propositions should also be true; when the habit is phlegmatic, the blood should be thin and poor; when melancholic, it should be richer and increased in consistency. But neither is the first proposition, nor its inverse correct; nor is it true that the average temperature of phlegmatic habits is lower than that of such as are choleric.

Dissatisfied with the *humoral* doctrine of Hippocrates and Galen, and the *humoro-mechanical* theory of Stahl, Haller attempted a new arrangement, grounded on irritability of the solids. When they united great firmness to great irritability, the habit was bilious; when they were firm, but less irritable, sanguine; when lax, but more irritable, melancholic; and when below par both in tonicity and irritability, the phlegmatic temperament prevailed. *Niederhuber* adopted a still simpler system, and ascribed every variety of constitution, not to corporeal difference, but to simple modifications of the vital power. *Cabanis* profited by all the doctrines which preceded him, and combined into one system, the humoral, mechanical, and vital theories. This physiologist makes six temperaments. The first four are those of Hippocrates, which he ascribes to the tone of the solids,—to the quantity and quality of the fluids,—to their proportion,—to the size and power of the lungs, heart, liver, and genital organs,—and to the sympathetic communications existing between them. The last two temperaments are the *muscular* and *nervous*, which result from the reciprocal predominancy of these systems, the one above the other. The views of *Richerand*, are very similar to those of *Cabanis*, and his number of temperaments is the same. *Hallé* distinguishes them into *partial* and *general*. The *general* are eight. The first four, which are those of Hippocrates, he traces to the proportions maintained between the lymphatic and sanguineous systems. When they were balanced the result was the sanguine temperament; when the lymphatic system was in excess, the constitution was *pituitous*; and where the sanguineous exceeded, the person was melancholic. The fifth and sixth, or *plethorico-sanguine*, and *plethorico-lymphatic* habits are founded upon the predominancy of those two systems from which these habits derive their name; and the seventh and eighth are the same as the fifth and sixth of *Cabanis*. The *partial* temperaments are divided into two classes, and arise out of visceral plethora, whether sanguine or lymphatic, and the energy of individual organs. *Kruger*, *Metzler*, *Rosanstein*, *Schroæder*, *Lawœz*, *Schmidt*, and many others have written upon this subject, and, as may be expected, have variously modified the doctrines and divisions of those who went before them; but it is unnecessary to pursue this history further, to prove that little of importance has been added to the views of the ancients. The four cardinal points of Hippocrates have been advocated throughout, although sometimes under new designations, and his followers have rather been loading the points of the compass, which were already known, with a new nomenclature, than actually adding to their number. Yet one cannot

easily discover wherein lies the strength of many of the arguments by which some of his temperaments have been defended. The nomenclature, at least, is certainly indefensible, for the melancholic have no more *atrabilis*, nor the sanguine more *blood*, than their neighbours; and a system so limited as the lymphatic, can scarcely be deemed important enough to constitute the temperament known under that name.

In introducing the author, whose work is now before us, it is not quite certain whether we shall be adding much to our stock of knowledge on the subject of Temperaments. His system, although advanced as new, only requires explanation to divest it of every claim to originality. It is adorned, no doubt with a few novelties, and the charms of phrenological mysticism have been tastefully thrown over it; but its basis was long since laid, and part of its superstructure has been erected for ages. But, like all doctrines which are formed upon popular sentiments, and which, by interweaving their interests with those of leading national feelings, embark their claims to public favour upon the same bottom, the doctrine of Thomas has gained, and is now gaining on society, and if the signs of the times can be any guide, it would not exceedingly amaze us, were it eventually installed into the canons of our own College. His theory sets out with the position, that *the relative size of an organ indicates the relative energy of its functions; or, in other words, that the volume and functions of a part are relatively proportional*. Living bodies, he argues, are composed of matter, disposed in organs, the nature and number of whose functions are generally regulated by the peculiarities of their structure. Each organ exerts a specific action which is peculiar to itself, and a reciprocal action which respects the system as a whole. All the organs of which the whole is composed, having thus a mutual dependence on each other accompanied with a distinct existence, one cannot exert more than its intended allotment of activity, without imparting a peculiarity of action to the whole. The most important organs are those which are contained in the three great cavities. Such as lie without are subservient; instruments by which these internal organs are assisted in discharging their own functions. In the first cavity lies the brain, which is the exclusive organ of intelligence and passion; in the second are placed the lungs and heart, which are the organs of sanguification and circulation; and within the abdomen are found the principal secreting organs, and such as are destined for the formation of chyle. Now, proceeds Dr. Thomas, it is found that in all animals the functions of these organs bear a constant relation to their size. When the brain is large, in proportion to the rest of the body, cerebral function predominates; when the viscera of the thorax exceed, the respiratory and circulating functions prevail; and when those of the abdomen, abdominal functions preponderate. In *Reptiles*, and other cold-blooded animals, the lungs are clumsy and unfit for active function. In the *Frog*, *Lizard*, and *Salamander*, they are mere sacs, internally divided into a few cells, and the heart is equally simple in construction; whereas, in *Birds*, and *Mammalia*, in which both these organs are complicated, these functions are energetically performed. Among *Zoophytes* the abdomen constitutes nearly the entire animal; in *Insects* the mechanism is more complicated; among reptiles the thoracic, or cerebral system is more developed, and the size of the abdomen is proportionably diminished. In birds, the abdominal functions are less neces-

sary still. In the *Herbivora* the abdominal secretions and excretions are very copious, because their internal organs are very large; while the *Carnivora* are as remarkable for the deficiency of both.

"Men, whose abdomen is either prominent or collapsed, approach very nearly the two extremes of herbivorous, and carnivorous animals. The first class, *abdominaux*, eat little at a time, but eat frequently; they digest almost continually, sleep much, and pass a sweet and tranquil life; but on the contrary, men, whose abdominal apparatus is small, compared with that of the head or chest, eat greedily, have imperfect digestion, form little chyle, and are dry and thin. It is not easy to conceive how physiologists can maintain, and even to the present hour, that a prominent abdomen, and great corpulency, are evidences of general weakness, for, say they, cellular tissue, and lymphatic fluids inundate all the organs, confine and impede their functions. But, besides that this explanation is altogether mechanical, it is not applicable to any organ, nor supported by any fact. It is easy to see, that the debility arises from the cerebral and thoracic systems, not from that of the abdomen, which is peculiarly active and predominant, which elaborates much chyle, and whose secretions are very copious. For how can one imagine, if we reflect for a moment, that large organs, which are in constant action, and whose products are considerable, have little energy. The abdominal viscera are subject to the general laws of organism; the more they are exercised, at the expense of others, the more they augment in relative size, and, by consequence, in relative energy; so that we can conclude, as we have done with respect to the thorax and head, that the relative size of the abdominal viscera indicates the relative energy of their functions." 103.

This, then, is the essence of Thomas's theory of temperament, and it may be submitted to the reader, whether it wears the attractions of a novelty. It is nothing more than the *doctrine of proportion*, which has been maintained from Hippocrates to Cabanis, and upon which, in fact, almost every division of this subject has hitherto rested. If any of the four constituents of the blood varied in quantity, this variation was made the origin of a new temperament. This opinion of Hippocrates, which was already as much a fancy as a fact, was stretched still further by his followers, and in place of limiting this variation to the elements of the blood it was extended to the general materials of the whole system; hence, we had the *muscular* temperament, if the muscular system prevailed, the *bilious* when the bile was in excess. But all this was *proportion* and nothing else, and when we are now told that we are getting a new system, and that the "author's astonishment was extreme" in finding so many accredited errors among writers on this department of physiology, we can neither say much for his modesty, nor participate in his surprise. It seems to us a distinction without much difference, whether we ground our doctrine of temperaments upon the predominancy of certain tissues and fluids, or of certain organs into the composition of which these tissues and fluids enter. The fundamental principle of both doctrines is *proportion*, and the arguments, which may be advanced in defence of the one, will equally apply to the maintenance of the other. If predominance of bile made the constitution bilious, or of blood sanguine, was not the disproportion, or preponderancy of either fluid the cause of such constitutional differences? And if the muscular, or nervous tissue prevailed, was not the excess of these tissues over the other textures of the system the reason why the constitutional habit was in the one case denominated muscular, and in the other nervous? If this be

granted—and Dr. Thomas will not be likely to deny us a concession which it were absurd to refuse—we ask wherein differs an arrangement from either of the preceding, which takes systems of organs for the ground-work of its divisions, in place of systems of tissues or of fluids? If the brain preponderate over the lungs and the liver, the *cranial* temperament is formed; if the lungs over the liver and the brain, the *thoracic*; and if the liver over the brain and lungs, the *abdominal*. All this is a matter of mere preponderancy, of simple material proportion. The parts chosen for weight and measurement, it is true, are different, just as different as systems of organs differ from systems of tissues, or classes of fluids; but the principle of all these doctrines is one and indivisible, and the only merit which M. Thomas possesses, is that of having made a new selection of parts and organs for the application of an old principle.

In prosecuting this view of measuring energy of function by size of organ, the author enters upon *Phrenology*, and gives us a laborious *inch and line* description of the mental faculties, examines with great minuteness the exterior of the thorax in order to discover the volume of structure which it encloses, concludes his mensuration by giving us the admeasurement of the abdomen, and then sums up the whole with the following sentiments:—

“After having shewn how the cranial, thoracic, and abdominal organs, which nearly constitute the whole animal economy, form three very distinct groups, with reference to structure, situation, and function; having demonstrated, how in a state of health, the relative size of an organ is a fair index of its energy; and having, finally, examined the means of estimating, more especially in man, the development of the viscera, by an examination of the cavities within which they lie, we now pass on to consider in succession the effects of the predominance of the cranial, thoracic and abdominal organs, from which the different temperaments or constitutions arise.” 130.

Before pursuing Dr. Thomas further, some critical observations upon this mechanical system of metaphysics will be indispensable. And first we would congratulate the profession upon this important *discovery*! The mysteries of function are now no longer to be talked of, the perplexities of metaphysics are now no longer to be encountered. The carpenter's rule and the school-boy's compasses have removed every difficulty! Mind may be measured by the foot, function by the yard, and the force of passions, the most unlimited, can be subjected to Gunter's scale! It was, certainly, once thought, that man was as much a *binary* compound as a *biped*, and that his material ingredient was not only inferior, but in all things subservient to his moral principles. But now it appears, that moral principle is the product of material structure, that the size of an organ is the measure of its function, and that for every square inch of solid matter, we have a certain forthcoming of vital power! Mensuration being then the basis of metaphysics, anatomy must be studied by the Casuist, before judgment can be given upon cases of conscience; and, by reading the culprit's skull, phrenology can ascertain without the hazard of perjury, or the subtleties of law, not only whether he be a *thief* or a *murderer*, but whether he have stolen ten, or ten thousand pounds. This is, indeed, no ordinary discovery;—verily, it is an improvement of vast magnitude even upon Gall and Spurzheim!

To be serious—is it actually the fact, that such as have great heads have

great intellects, and that those, whose *enbonpoint* is considerable, have considerable appetites? Is it true that the largest liver secretes the most bile, or that the largest lungs arterialize the most blood and consume the most oxygen? To answer these questions, is to decide upon this theory. We admit, that in tracing animated beings up from the zoophyte to man, the nervous system is in general on the increase as we ascend, and that the functional perfection of this system maintains some general ratio to the complexity of its mechanism. All this we are prepared to admit. But is the gradually increasing size of the *instrument* any proof of the gradually decreasing power of the *agent*; or is the mere circumstance of an organ's progressive development any argument against a corresponding progressive augmentation of its presiding and acting vitality. Let it be supposed, for the sake of illustration, that man is a compound being, that his materialism is under the superintendence of an intelligent principle, and that the functions of this materialism are the aggregate results of their co-operation, is it not reasonable to expect, is it not what would be anticipated, that the degree of organic life or presiding principle will bear some proportion to the quantity of organic matter or subordinate instrument, and that, since the presiding principle works only through the subordinate instrument, just as the instrument works only by the power of the agent, the agent's influence must generally limit the size of the instrument, and the size of the instrument must generally regulate the measure of the agent? Pure animal function never was, and never can be performed without the instrumentality of matter. It is only through such an intervening and co-operating medium that vital principle manifests itself in our present state of life, and it is neither fanciful nor fanatical to believe in the independent existence of mind, while at the same time it is maintained that, in a compound creature like man, both the energy and extent of his every function depend no less upon matter than upon mind. As the scale of organization ascends, the scale of life ascends along with it; texture becomes more minute, function more complicated, and the varying habitudes of different animals require corresponding modifications of structure. Muscular strength is required by one, acute sensibility is indispensable to another; the respiratory functions must predominate in this, the cerebral in that order of beings. Thus is it that the work to be done regulates the dimensions of the organ by whose instrumentality it is to be effected, and the size of the organ bears in *general* (*but by no means universally*) so close a proportion to its amount of vital principle, that, forgetting the agent altogether because unseen, this correspondence between size of instrument and perfection of function has induced many to ascribe all the phenomena of life to corporeal organization, because it alone is palpable to the senses. Life is thus degraded into a sophistical inference, and the æthereal chain by which man is linked to immortality is cut asunder!

The brain of the horse has been estimated at the five hundredth part of its body, while that of man stands as high as the thirty-fifth; but this fact goes no further than to shew, what no spiritualist ever denied, that the vital principle requires an increase of instrument when it is loaded with an increase of work. This is a reasonable requisition on the part of Nature, and a reasonable inference on our part; but to maintain that function is the uncompounded result of material structure, that thought is as much a manufacture as urine, and that passion can be placed between the compasses, or measured

by the yard-stick, are most unwarranted inferences, alike hostile to the interests of medicine and morality. The liver of the fœtus is its largest viscus, yet are the hepatic functions most active during fœtal life? The nervous system of the Orang Outan is as large in proportion as that of man, yet are his moral principles as refined, or his mental powers as developed? Is it not well known that the *lean kine* of Pharoah ate more than the *sleek and well-favoured*; and is not the same fact as certain among ourselves? Has the Elephant, by having a much larger brain than man, any chance of out-running him in the march of intellect? Is the muscular system of the common Maggot extraordinarily developed, yet is there an animal in being more active for its size? Are individual or national differences to be explained on such principles? Have the most gifted individuals the largest heads, or the greatest *blockheads* the smallest? Are the English more remarkable as a nation than the French for intellectual organs; or do the French exceed the English in that of self-esteem? Why are the Spaniards distinguished for treachery, or the Italians for love; and why are the passions of the Laplander nearly as cold as the snow he treads upon? How can external measurement of the chest ascertain whether its size depend upon hypertrophy of the heart, or of the lungs, or of both; and how can the exterior of the skull discover the peculiarities of cerebral structure, when no correspondence is preserved between its external and internal surfaces? These are merely a tithe of the interrogations we feel disposed to put to M. Thomas, and when these shall have received a satisfactory answer out of his system, our veneration for *Materialism* will be greater than it is. It is true that a *foot note of six lines* has been appended by the author, to a work of *two hundred and fifty pages*, with the view of rescuing his character from such a creed; but when we add that four of these lines contradict the other two, that the six together assert nothing, and that the motto of the volume is the following extract from Dupaty—"That the moral man lies hid in the physical man"—this *laboured* marginal commentary, we apprehend, will scarcely save the text from heterodoxy.

It is certain, then, that none of the theories which have been examined, not even that of M. Thomas, will account for every temperament. In the construction of the most of them an ingredient of vital importance has been virtually excluded, and until it be introduced, unfashionable as its introduction may be, we expect no purer light to emanate from such gross materials. Some of them have certainly revealed many facts and have removed a few difficulties, and to deny or resist their application to a certain length would be to fall into the error which it is our endeavour to chastise. To say that the solids may be relaxed, or that the fluids may be disproportioned; that the nervous system prevails in this, and the sanguineous in that constitution, or that one organ acts with more energy than another, is all very just, is what the natural philosopher might anticipate from a machine so delicately adjusted, and so easily deranged. But we maintain that all this is nothing higher than Mechanics, and until it can be shown that the human body is a mere machine, given up to the sole government of mechanical laws, such principles are no purer than unmixed materialism, and are totally disqualified to account either for the origin, or action of half the temperaments which exist. How often has one disastrous event metamorphosed the entire constitution of an individual, and reduced him who was superlatively

sanguine into a melancholy recluse? How frequently are the passions, prejudices, and prepossessions which distinguished our early years, wholly altered or materially changed, when we arrive at a more advanced period of life? The enchanting and gilded thoughts of infancy vanish before the chaste and steadier light of manhood; and the sanguine anticipations of youth are obscured or buried in the clouds of age. A misty morning sinks us into melancholy, a transient sunbeam rekindles hope, and the dream of a night, or the success of a day so changes our condition as not unfrequently endangers our identity. Horace, speaking of the mutability of man, says—*nil fuit unquam sic impar sibi*—and Dryden's lines—

A man so various, that he seemed to be
Not one, but all mankind's epitome.
Stiff in opinion, always in the wrong;
Was every thing by starts, and nothing long;
But in the course of one revolving moon
Was chemist, fiddler, statesman, and buffoon.
Then all for women, painting, rhyming, drinking,
Besides ten thousand freaks that died in thinking.

are applicable to thousands besides the author of the *Rehearsal*.

In all these cases and such as these, both the structure and size of organs continue very much the same; there is something prior to mere corporeal organization, there is a vital principle, a spiritual agent to which the body is subservient, and which in our view is more efficiently operative in the formation of temperament than any, or every mechanical difference. It is true that the human body is a machine; but it is a machine endowed with life and fitted for living functions. It is true that the laws of chemistry and mechanics operate within it, *because* it is a machine; but then they operate in a peculiar way and under the direction of peculiar principles. *Life* and *mechanism* are, therefore, in close union in our present state of being, and every function which is carried on, whether it be that of thought, or loco-motion, is conducted by *a compound power, which is the result of life working upon suitable machinery*. The metaphysics of this subject have been sadly excluded from its consideration, and the science of life has been conducted with the level and the plumb-line. Phenomena, which are essentially metaphysical have been traced to material causes; chemistry has been tortured for the solution of difficulties it was never adapted to remove; astronomy has been consulted in quest of light; and man has been studied, strange as it may appear, through the science of the stars! If the habit were irritable, it was because the fluids were irritating; if passive, it was because they were mild; if the temperament were moist, it was because the solids were deficient; if dry, it was because they predominated; if the functions were languidly performed, it was because the fluids were unstimulating and unfit for circulation; but if actively, the hydraulical department of the machine was in good working order. Such clumsy physiology might have been tolerated in the days of Paracelsus, but it is inexcusable in ours; and it ought to chastise the present host of talent to have it said, that one of the first writers of our age among the French, and a distinguished Encyclopædia-maker among ourselves, have advocated this crude philosophy without a syllable of improvement, and have sealed it with the arms of the nineteenth century.

In the inferior animals there are no such varieties as in man. One class

or genus, no doubt differs in its habitudes and dispositions from another, and there may occasionally be discovered some shades of difference among individuals of the same species, but these shades are very indistinct, and do not authorise any differential arrangement. Rousseau has, indeed, said that the monkey was only a savage man, and Linnæus has classified us with *Apes*, *Lemurs*, and what appears even a stranger association still, with *Bats*; but as Materialists themselves do not now seem proud of such society, it is unnecessary to remonstrate with the taste of an arrangement so incongruous. *L'homme ne ressemble qu'à l'homme lui-même*. In our species alone are recognizable such distinct varieties, and the well-known fact, that these varieties so multiply as civilization and mental refinement increase, that the same nations and individuals differ as much from themselves at different periods as they do from others, is decisive that more importance should be attached, in the investigation of this subject, to the moral system of man, than it has been hitherto fashionable to ascribe to it. The young Savage of Aveyron had not been absent many months from the mountains, before he suffered three severe attacks of disease, and had changed very materially in taste and habit. How different was Rome in the reign of Numa from what she was during that of Augustus! At first, quiet in disposition and moderate in desire, she was satisfied with limited authority and innocent enjoyment; but her passions burned as her prospects brightened, feuds became numerous, factions formidable, a spirit of immoderate ambition began to wanton in the arms of luxury, and her whole moral character was ultimately changed. And what a contrast is presented in the eventful history of Wolsey, between the contented school-boy, while conning his master's task, and the disgraced Cardinal while mourning over the disastrous career of his immoderate ambition! The problem of Condillac—"the organization of the physical man being given, his moral constitution is required"—can never receive from these principles a satisfactory solution, and the sentiment it conveys is neither safe morality nor sound metaphysics. The intimacy which subsists between mind and matter in the human system is mysteriously close, but mind can exist without matter, as well as matter without mind. Their union is conventional, not necessary. The qualities of the one are as various as those of the other and at the same time as distinct, and while there is no evidence to shew that an inherent tendency to disease or annihilation is one of the mental properties, there is, as has been already argued, convincing proof that its original constitution in different individuals may be very different, and that this difference may, from its connexion with and influence over organic function, impart a constitutional peculiarity to systems in other respects the same. It were as difficult to maintain that the minds of *Shakespeare* and of *Chrichton* differed in nothing from those of *Louis the 8th* or *Charles the 2d*, as it were to shew that *Dominie Sampson* and *Dumbie Dykes* were twin brothers. Perhaps two individuals in all respects intellectually similar never have existed, and since mind is a creature as much as matter, although different in essence and obedient to different laws, why should it not be equally subject to original differences? The talented youth may degenerate from misfortune or misconduct, and the most unpromising powers may be improved by exercise. Climate may make the courageous timid, and the mild may become ferocious through adversity. Want may palsy the hand of benevolence, and a favourable crisis may develope springs of action and lineaments of character

which might have otherwise remained unnoticed, because unknown. All this may happen, but this is not sufficient to account for the ten thousand forms of metaphysical being, and the ten times ten thousand shades of talent and of taste ; and so long as we know that man is a compound, that his component parts are different, that he exhibits during every period of life properties pertaining to each department of his system, that these properties differ in different individuals, and that their difference can only be accounted for on philosophical principles such as ours, we ask, and we put the question home to every friend of materialism, why perplex the subject by confining ourselves to one department when both should be examined ; why, by striving to explain metaphysical phenomena on physical principles, leave most interesting questions without answers, and why study a compound being, and a being whose every action is a compound action, by laws which can only apply to one hemisphere of his constitution ? We might, with as much prudence of system and as much prospect of success, learn geography upon *half* a globe ! Who could ever master the localities of America by travelling through the Continent ! What Logician would hazard a conclusion in the absence of his *major* premise ; and what Historian, who was not somewhat more than courageous, would write upon the constitution of a *mixed* government, while wholly ignorant of the prerogatives of the *King* ? If man will not be studied with reference to his constitution he can never be understood, and although a few of the problems of life may be worked with the aid of chemistry, dynamics, hydraulics, and of algebra, many must be abandoned as inexplicable mysteries, or receive their solution from the labours of Locke, Reid, and Stewart.

There are, then, *two* sets of causes of temperament—*corporeal* and *metaphysical*, which, while they are widely different in their nature, by their action and re-action on each other produce very similar effects. The preponderance of a certain organ, the disproportion of a certain system, the susceptibility of one tissue above another, the peculiarities of climate and of education, the habits of society, and the varying changes of life, pertain to the first class and are highly influential ; but there are other agents no less powerful, which are purely metaphysical, and which result from the different states and proportions of the mental powers. The imagination may be constitutionally weak, or active ; the perception may be acute, or dull ; the judgment may be impotent, or strong ; the passions may be cool, or ardent ; the imaginative faculty may prevail in one mind, the reasoning faculty in another ; love of power may give a cast to one individual ; thirst after fame may mark the character of the fourth : and as certain corporeal actions are directed by certain moral causes, not only the functions but the form of man must be considerably under their control.

It is not intended to be argued that the conditions of the body will always correspond with those of the mind ; they certainly will not. It is only maintained that the operation of certain moral principles will favour the developement of certain physical powers, just as the preponderance of certain physical powers will favour the developement of certain moral feelings ; and it is this action and reaction, this interchange of influences which we wish to insist upon, and which in our view can only be studied or understood under the guidance of our principles. We are, therefore, equally opposed to Niederhuber, who ascribes all to difference of vital power, and

to Thomas, who attributes all to difference of organic structure; neither system being singly sufficient. Both systems operate in the discharge of general functions, both systems influence the functions of each other, and, consequently, both systems should enter into our views of temperament. Metaphysics in medicine is like physic in a *farm-house*, it is seldom thought of. If the body be depressed it is excited, if weak, strengthened, if strong, weakened, if cool, heated, and if hot, cooled. The veriest machine that was ever wrought could not be treated more mechanically. The blacksmith tempers down his iron if it be too hard, and reduces his spring if it be too strong; the engineer opens his safety-valve if his steam be in excess, and throws on fuel if greater power be required. With the blacksmith and engineer this reasoning is correct, for the mechanism, with the actions of which they have to do, being palpable to the senses and obedient to the laws of mere matter, can be fully judged of by the senses and subjected to these laws; but with the physician it is seriously different. He is concerned with a mechanism which is at the disposal of a presiding principle, which gives to it varieties of function proportionate to the varying constitution of its own nature; while the agent in turn is itself subject to the reaction of the instrument through which it operates. This important, this fundamental fact should never be lost sight of.

Mental constitution must always be studied in connexion with corporeal mechanism. A true knowledge of the one is incompatible with total ignorance of the other. Man is but half explored when the anatomist has finished his dissection. When his knife has revealed every nerve, when his microscope has disclosed to sight the hidden mysteries of structure, and when his curiosity has exhausted its resources by ultimately reaching the rudimental molecules of organization;—we ask what has he done—what has he discovered? Has he found out any thing like life? Has he revealed the seat of thought or the granary of memory, or the throne of judgment, or the gallery of imagination? Has he drawn the veil from off the fountain of action, or has he traced up function to its source? In the origin and insertion of his muscles can he detect the cause of their contractility; or will chasing a nerve to its most capillary twig shed a ray of light upon the mysteries of its office? To know that the liver is composed of glandular acini, that the brain is a congeries of agglutinated globules, that involuntary, differ from voluntary muscles in being made up of fibres which are not parallel but anastomose, does not add one idea to our scanty store of information upon the elaboration of bile, or the phenomena of mind, or the origin of motion. After collecting every circumstance and comparing every fact which the accumulating labours of centuries have disclosed on glandular anatomy, are we one jot the wiser on the subject of secretion, and can we assign a single reason, having any degree of plausibility, why the kidneys should not secrete bile, or why they do secrete urine; and how one common fluid, which is apparently similar in whatever organ met with, can furnish the richest variety of substances, and can deposit these substances with such unerring precision, as to time and place and quantity, that muscle is never secreted where bone ought to be laid down, and skin is never formed where either would be necessary? Unassisted mechanism is a deaf oracle upon all these subjects. How often has she been, how often is she consulted; but she answereth not, and never will, never can answer? The worshippers

of materialism may continue to call upon her, and hecatombs of subjects may be yearly offered up to her, and the incense of phrenology may ascend to her from every surgery upon the Continent, and our youth may be made to worship her from Dan unto Bersheba, and all such idols of fanaticism as independent life, immortal principle, aura divina, spiritus æthereus, may be immolated before her upon the shrine of liberal sentiment as a vindication of her supreme divinity, and the God of the Creation may be sent to herd, like the Babylonish King, with Lemurs and Bats as a proof of the superior enlightennment of the present age; but, as for us we are still too strongly wedded to the venerable worship of our forefathers, or, if the phrase be more palatable, too strongly warped within the prejudices and prepossessions of their antiquated dogmata, to see any thing in a system, constructed out of such unworthy materials and cemented by such untempered mortar, which should induce us to abandon views authorized by revelation, supported by reason, established by metaphysics, uncontradicted by any facts and confirmed by every day's observation. *Nescio quomodo inhareat, in mentibus quasi sæculorum quodam augurium futurorum; idque in maxime ingenis, altissimisque animis et existit maxime, et apparet facillime.* Such is the testimony of Cicero; and we do esteem that bastard independence which can look upon non-existence with apathetic coolness, yea even that superlative degree of it which can convert a theme so solemn and so sacred into a subject of profane ridicule and of reckless reviling, as the last and lowest evidence of a debauched and degraded mind.

"From what we have seen in the first part of this work, temperaments or constitutions are the varieties which result from the different proportions of the three great cavities. Now we can distinguish in man seven temperaments. The first is the *mixed*, or that in which the three cavities are proportionable; the second, third, and fourth are the *cranial*, *thoracic*, and *abdominal* temperaments, as the cranium, thorax, or abdomen preponderates, and the fifth, sixth, and seventh are binary compounds, as the cranium and thorax preponderate over the abdomen, or the cranium and abdomen over the thorax, or the last two over the first. These are denominated the *cranio-thoracic*, *cranio-abdominal*, and *thoraco-abdominal* temperaments." 132.

It is evident that as the accuracy of this division must be proportioned to the truth of its principles, little dependence can be placed in it. The *mixed* temperament is regarded as the best, and the Apollo of Belvidere is given as its most perfect representative. In such a constitution there is nothing in excess. The brain cannot be the seat of passions too violent, although it may exhibit them all; the intellectual faculties are sufficiently developed, and do not allow themselves to be misled into the labyrinths of hypothesis, or the uncertainties of conjecture; the blood is neither too "fibrous nor animalized," the abdominal functions are freely discharged, every member can exercise with the greatest ease every necessary movement, and the physiognomy represents in every feature that perfect proportion for which the entire system is distinguished. "The mixed temperament is very general among the French, and it is most frequently observed between the ages of 20 and 45, while every organ is in a state of maturity."

We wish not to contend the right by which M. Thomas ascribes to his countrymen the *beau ideal* of bodily and mental perfection. If such partiality be not well founded, it is at least natural. But we must maintain,

that as far as history and our own experience go, moral worth and corporeal beauty are by no means so closely united. Homer describes Helen as violently passionate; Cleopatra was enthusiastically fond of Anthony; and the unfortunate Queen of Scots was equally distinguished for her imprudence and her charms. Minerva was never painted by the ancients as Venus, nor Mercury as Bacchus; and the Grecian youth who fell in love with his own person, will never be cited as a model of intellect. It is unnecessary to describe the remaining temperaments minutely. Cataline, Tiberius, Brutus, Cassius, and almost every hero of antiquity; Pope, Pascal, Voltaire, Rousseau, and almost every genius of later times, are adduced as examples of the second, or *cranial* temperament. The statues of Pericles were said to be crowned with a helmet to conceal the disproportioned size of his head, and Teleclides, in his description of him, supports our author's theory, if a poet's portrait can be deemed a likeness;—

“Perplex'd by business, by its weight depress'd;
Now his huge head hangs silent on his breast,
While from that head, in which ten men might dine,
Loud thunders burst, of dreadful storms the sign.”

This information respecting Pericles is to be found in Plutarch; but M. Thomas has not dealt so liberally with us, for we are left to discover where he has obtained the cranial dimensions. Hercules is the model of the *thoracic* temperament; which is common among the robust inhabitants of the country, and men of active habits. It is more favourable to physical than mental exertion. The *abdominal* constitution is more frequent in town than country, and, as might have been expected from our author, is described as more characteristic of the English, Dutch, and Germans, than the French. The *cranio-thoracic* is the temperament of usurpers, great conquerors, and, a combination which may render one class of the profession a little vain, of *good operators*. The *cranio-abdominal* temperament is said to belong especially to females and to infancy. But if “*mulier propter uterum condita est*” be a sentiment of any truth, the ventral temperament should be more appropriate to the former. Individuals of such a constitution are more attached to sensual pleasures than mental enjoyment. Lastly, the *thoracico-abdominal* is the constitution of the inhabitants of Asia and Africa, and is considered the most unfavorable form of temperament. When very perfectly developed, madness, idiocy and imbecility are the ordinary consequences.

As our main object in this paper is to ascertain the nature and influence of temperaments generally, it is not necessary for this purpose to insist upon any division, much less to examine the merits of all those which have been proposed. The principal classifications of the ancients have been already noticed; those of Haller, Cabanis, Richerand, and Hallé have been mentioned, and that of M. Thomas is now before us. Our views admit of an arrangement different from any yet made public; but as a review is not the most suitable place for its introduction, we shall neither propose any new, nor yet implicitly follow any old division. Perhaps, for practical purposes, that adopted by Bostock is the best. “If to the four temperaments of Hippocrates we add, after the example of Gregory, a fifth, the nervous temperament, and bestow new appellations upon the other four,

we shall have the leading varieties of the constitution under the denominations of the *nervous*, the *sanguine*, the *tonic*, the *relaxed*, and the *muscular* temperaments." Of the above the *melancholic* and the *sanguine* are not only the most frequent, but seem to us the only original temperaments. The *nervous* habit, although the creature of society, and, therefore, artificial, is, however, deserving of distinct notice; for until our present habits of luxury and splendour give way to a simpler mode of life, it is quite certain that it will continue one of the most important, because one of the most common temperaments. Of the rich and fashionable, the luxurious and indolent, it is the almost constant companion. As to the points of difference between these three and the *phlegmatic* and *choleric* constitutions we shall speak hereafter. The sanguine is the temperament of the young, and most northern nations; the melancholic of the old, and of the inhabitants of moist climates. But since every system is distinguished for some peculiarity, these elementary simples are seldom found in an uncombined state. Hippocrates maintained that our temperaments changed as often as the season; that in Summer they were sanguine, in Autumn melancholic, in Winter phlegmatic, and in Spring partly sanguine and phlegmatic, making atmospheric temperature and corporeal temperament to correspond. But, without asserting so much, it may be said that scarcely are two bodies alike formed, or two minds alike constituted, and that many circumstances may occur during life to render totally dissimilar, what at its commencement had been virtually the same. The ardency of youth may be frozen by adversity, the despondency of age may be antedated by misconduct. The choleric may become phlegmatic, the melancholic sanguine. With all these states of system it is natural to expect different degrees of health.

In the *melancholic* temperament, which was called by the ancients *siccum*, because the solids were dry, the heart is moderate in its action, the pulse slow, and the functions of life sluggishly performed. The mind is tardy in resolve, but steady in action. Perception is slow, judgement sound, memory uncertain, imagination gloomy. Every event is examined in its dreariest view, trifling dangers are magnified by fear, hopeful prospects are obscured by despondency. The stomach and liver are easily deranged, the intestines are torpid, and it has been fashionable to regard the biliary secretion as diseased. The solids are supposed to be firm and constricted, the fluids scanty and viscid, and diseases of obstruction as dropsy, hæmorrhoids, jaundice, and affections of the brain as apoplexy, phrenitis, mania, are liable to occur. The melancholic temperament is most frequent in advanced life, and among people of sedentary habits. It seldom appears in youth, misfortune is its most ordinary cause, and being found frequently accompanied with visceral disorder, many have regarded it more as a natural *καρμικόν*, than as a symptom of disease. Works of the most laboured industry have been the fruits of this temperament, and minds of the highest rank have borne the burden of its influence. Rousseau and Zimmerman, Gilbert and Pascal, are illustrious examples of such as combine the most desponding views of life with the most luxurious means of rendering life happy; and in the delightful Tasso, and interesting Kirk White we have melancholy proof that the liveliest imagination, supported by the buoyancy of youth, can neither always avoid, nor counteract it.

In the *sanguine* habit circumstances are very different. The action of the

heart is strong and quick, the pulse frequent and full, the functions conducted with energy and effect. The mind is ardent and aspiring, impressions are easily effaced and made, promises are more willingly entered into than performed, the taste is capricious, the fancy wayward. The judgement is not as sound as the imagination is active, the memory is more ready than retentive, perception is quick, love ardent but easily cooled, anger excited by trifles and by trifles laid. Sensibility is acute, irritability is great, fortune is enjoyed in her sweetest smiles, and adversity is suffered in her cruellest pangs. The solids are lax and the fluids copious. Susceptibility to disease is very considerable, and the diseases most readily induced are those of excitement. Inflammations of every degree, fevers of every type, hæmorrhages of every organ. This form of constitution is general in youth and prevalent in manhood; but it rarely sweetens the vale of life, for experience is its deadliest enemy. Our knowledge of the past, while it makes the present less faithless, renders the future less promising. As the drama of human life hastens to a close, the scenery becomes less and less fascinating, things appear more as nature made them, the flame of hope sinks in the socket of disappointment, and ere the curtain falls the spell is broken. The sanguine temperament has been called by Prichard *constitutio Germanica* from its prevalency among the Germans, in the French and Irish it is very common, and some have maintained that it is less frequent in females than in males.

As the melancholic is the temperament of age, the sanguine is that of youth; but between these two constitutional extremes there are many points of difference, and many varieties of temperament have been formed to account for them. We have the *choleric* and the *phlegmatic*, the *acrid* and the *bilious*, the *moist* and the *nervous*. It must, however, be admitted that any intermediate varieties which exist are rather compounds than simples. The chief distinction between the sanguine and the dry is that the muscular system is more developed in the former; and the moist differs from the cold in having a greater stock of fluids. If the solids be denser and the nervous system more irritable than in the sanguine, then we have the choleric; and if we find less irritability and greater strength the phlegmatic habit is produced. We deem it, therefore, unnecessary to go into any description of what are mere combinations. The simples being once well known such compounds as may result from them it will not be difficult to understand, and although the phlegmatic and choleric have been hitherto regarded primitive, they appear to us to be secondary formations. The phlegmatic agrees with the sanguine in having abundance of fluids, and with the melancholic in having little irritability; it is, therefore, the product of a certain mixture of properties pertaining to these two elementary habits; while the choleric to the irritability of the sanguine adds the pertinacity of the melancholic temperament, thus shewing that in the sanguine and melancholic exist all those general properties out of which subornate peculiarities originate. The sanguine would be choleric if he were less fickle, the choleric would be sanguine if he were less pertinacious; the sanguine would be phlegmatic were he more passive, the phlegmatic would be sanguine were he more irritable. So far, then, as the formation of these four forms of temperament is concerned, two series of principles variously proportioned are

sufficient ; and as these proportions can be varied *ad infinitum* the variety of secondary habits may be infinite.

As to the *nervous* temperament, it is merely the product of excess and luxury. Such a constitutional character is seldom found in rural and simple life. As the appetites are gratified desire increases, demands are made upon the expenditure of the system which it is impossible to grant without sustaining injury, and the nervous system being the most sensible to disorder is the first to betray manifestations of disease. While we oppose, therefore, the opinion of Darwin, who maintains that "by temperament (in general) should be meant a permanent predisposition to certain classes of disease," it is evident that, in as far as the nervous habit is concerned, its definition may be couched in still stronger terms, and it may be said that by the nervous temperament should be meant the first stage of constitutional decline. Certain it is that this habit is becoming every day more common. The list of diseases which Dr. Trotter enumerates as pertaining to it is truly formidable, and were some of the hints attended to which that very able writer has made upon the effects of dissipated life, nervous head-aches and hysterics would be much less fashionable and much less frequent. At present it is deemed vulgar to look healthy ; the pale and sickly are alone interesting ; and if our youth wish to be considered handsome or genteel, the bloom of health must be got rid of, head-ache must be frequent, and the turning of a leaf, or the tread of an insect must never fail to be followed by an evening's set of fits, or a days indisposition ! However profitable this fashion may be to one class of the community, and however enviable it may be held to have our lady's health hourly enquired after by fifteen or twenty visitors, it is devoutly to be wished that the present rage after fine figures and genteel faces, after morning head-aches and evening vapours, may not increase much further ; otherwise every family will require its resident physician, or stand in hourly danger of being thrown into confusion through violent attacks and sudden illnesses. The wealthy and the noble, it is true, being alone competent to struggle with such a tax upon their constitution, are tolerably sure, as long as it is paid, that neither the pauper nor the tradesman can in this instance annoy them by treading on their heels ; but if sickness be necessary to the acquirement of distinction, we may hazard the charge of vulgarity by thinking so, but we do think that the distinction is too dearly purchased. There is at least one consideration which should be of some weight with those who advocate present fashionable life. It has been asserted by a very competent judge, that *fortes creantur fortibus et bonis*, and although the privilege of making our constitutions as degenerate and contemptible as we choose may be insisted on, there is neither law, right, nor reason for inflicting upon posterity, miseries, the danger and extent of which are to us equally unknown.

Family likenesses are frequent and familiar, slight hereditary deformities are not uncommon. While Dr. Gregory was visiting in a distant part of Scotland, he met several people remarkable for a peculiar form of the nose, resembling that of the Grand Chancellor of Scotland in the reign of Charles the First ; and upon making enquiry they were found to be the descendants of that nobleman. The family of the Le Comptes were hereditarily subject to blindness. Before the age of sixteen their sight was tolerable, but after that period it gradually declined. Now, if temperament be something

like a tendency to disease, and if disease be hereditary, unless a parent have been denied by nature a parent's feelings, he surely cannot be told with indifference, that while he is by rioting and wantonness destroying his own system, he is also infusing into the stamina of his future progeny debility and disease. Some families are victims of the same maladies from generation to generation. One is preyed on by consumption and another by scrofula; one is subject to madness and another to epilepsy; gout is the scourge of this, hydrocephalus of that family. Frequently, no doubt, the circulation of such currency is beyond our control. The stream may be contaminated ere it reach us, or the hereditary affection may be such as defies exertion. In such cases our only duty is submission, for nothing is expected where nothing can be done; but when we have at our own disposal whether our children shall be useful or a burthen to society, whether they shall be a curse or a comfort to themselves, reason, religion, affection, interest and duty are a sample of the motives which should influence our choice.

In the *sanguine*, diseases of strength and activity are prevalent; in the *melancholy*, visceral and vascular obstructions; and in the *nervous*, affections of excitement and debility. These propensities depend upon two sets of causes. The metaphysical composition of the *melancholic* is more remarkable for steadiness than activity, for perseverance in pursuing an object than for love of enterprize. So is it with his corporeal mechanism. His nerve is less sensible than firm, and his fibre more disposed to continue than commence disease. When an exciting cause is applied to such a system, it may either be entirely resisted, or only partially succeed, and an attack, which would have committed destructive ravages in a more susceptible habit, will by it be comparatively disregarded. When the excitement, however, has had effect, and morbid action has commenced, the same principle by which it was at first resisted now favours its continuance. Slight derangements are less common than extensive disorganizations. Symptoms are slow in progress and moderate in degree, the general system is little affected by local disease, and visceral action of most destructive type may be working its silent death of parts the most important to life, and in consequence of the few sympathies by which it is surrounded little may be suffered, and still less feared. Hence are daily met with in the bodies of such individuals enlargements, hardening, and abscesses of the liver—hypertrophy of the spleen—adhesion of the intestines—thickening of the mucous membrane of the stomach—obstructions of the mesenteric glands—consolidation of the lungs—ossification of the valves of the heart and coats of the blood-vessels. In all these and other such affections length of action compensates for energy, chronicity for acuteness, and extent of ultimate mischief for the reluctance to activity which at first was manifested.

In the *sanguine* all is nearly opposite. The mind is sensible and active, impressions are easily made and dissipated, pain is exquisitely felt, and pleasure enthusiastically enjoyed. In this constitution susceptibility is the leading character both of mind and body. The sensibility of the body renders prostitution of the mind more easy through temptation, and the sensibility of the mind renders disease of the body more easy through excitement. The strongest tendency to physical and moral evil is thus combined in the same system, and although there are counteracting causes which may weaken the

tendency of the former, that of the latter is too frequently successful, having weaker guards against greater dangers. Temptations trifling in the abstract are here formidable, and causes of disease, which in the preceding temperament would have been successfully repelled, do here more certainly take effect. The slightest mental agitation inflames the blood and shakes the system, and the slightest aberration of the body from a state of health irritates the mind. As the diseases of the melancholy are chronic, those of the sanguine are acute. Inflammation once begun rapidly proceeds, fever once kindled burns with an exterminating flame, and hæmorrhage once established requires but a few minutes to destroy life. Where so much susceptibility to disease is combined with such activity, the hazard is extreme if symptoms be neglected; but nature seldom exposes to danger so imminent without furnishing means for either its prevention, or removal. The same sensibility, which assists the exciting cause to the establishment of disease and hurries that disease forward to a crisis, gives a prominence to its symptoms by which they cannot fail to be observed, and thus affords early evidence as well of its extent as of its existence. Action being acute, concealment is impossible; the features being fully pronounced, the face cannot be mistaken: and although the date of danger is nearly that of the attack, the warning is given when the first blow is struck.

In the *nervous* temperament tendency to disorder increases with a corresponding decrease in the powers of resistance. Mind and body, as it were, are more intimately intermixed than usual, and action and re-action are, therefore, greater and more frequent. The natural susceptibility of the sanguine is in this habit morbidly accumulated, and the tone and strength of the melancholic are almost altogether lost. The imagination is wild, the judgement easily deranged, the passions strong and easily excited. There is nothing so extravagant which may not be fancied, nor so improbable which may not be believed. The Impostor Mesmer was well initiated into the mechanism of this temperament, and nervous people are very generally selected by such jugglers, as the safest whereon to practice their deceit. The fibre is lax and unresisting, the nerve is unstrung, the heart is irritable, the circulation weak but rapid. Dr. Trotter discovers in deranged sensations and inverted sympathies of the great sympathetic the source of all nervous disorders. Whether the causes be moral or physical, they are supposed to exert their influence on this portion of the nervous system,—

“Whose office directs the most important operations in the animal economy, and binds together one great circle of feeling, actions and motions both distant and opposite. Hence a concurrence of symptoms of the most extraordinary kind, that invert the usual functions of so many viscera, suspend their power, or give to them new movements, by which means a train of false perceptions occupies the mind, and ideas the most monstrous and incongruous supplant for a while all rational thought. In this reciprocal action between body and mind, in whatever part of the system disease commences it is quickly communicated to all the others.—Thus, in a dyspeptic condition of stomach, such as attends nervous complaints, it is not the muscular fibre alone of that organ which is to be considered as diseased, but every gland and pore, exhalant and follicle which separates either gastric juice or mucus, and, consequently, all the fluids are poured forth in a vitiated state. The appetite will then be irregular, sometimes suppressed, sometimes voracious; the acidity will increase so as to become painful, the food will remain indigested, and uneasiness and inflation of stomach will succeed. Other viscera will by consent of nerves be also deranged

in their respective offices. The pancreas, its juice and duct are affected. The liver will excrete the bile in quantity and quality both different from its healthy state, and the ducts will be irregular in conveying it forward. The peristaltic motion of the intestines will be inverted and inconstant, and constipation or diarrhœa be the consequence. Even the kidneys, more remotely connected, will discover indisposition by the urine being voided turbid or pale, in small or profuse quantity, sometimes with pain in the loins, ureters, bladder, testes, or mammae.

The duration of nervous diseases is as different as their character. They may appear in paroxysms of a few hours length, or continue uninterruptedly for years; and wherever the nervous temperament exists in perfection, there will not only be a strong *penchant* to derangement, but considerable difficulty in removing such as has already formed. An opinion, which to us seems rather novel, is maintained by M. Thomas on the ratio between the physical strength of a part and its susceptibility.

"The stronger and more predominant an organ is," says he, "the more sensible it is to natural excitements; the more is it inclined to exercise. And as it is not easy for an organ, strongly disposed to action, to avoid excess in obeying its own inclination, it often becomes diseased. Thus, men, in whom the brain predominates, frequently fall victims to the excessive exercise of their passions and faculties, and become affected with melancholy and *les folies variees*; the thoracic are obnoxious to carditis, pneumonia, and acute rheumatism; and the abdominal to gastric and hepatic disorders. A weak organ, although little prone, on the contrary, to action, although little sensible to excitants, is not less frequently obliged to use immoderate exercise, because a thousand varied circumstances often accumulate upon it natural stimuli. It is thus that when the thoracic viscera are small their action is easily increased, and they become exposed to thoracic congestion and various forms of phthisis. On the same principle idiots and they, whose brains have little energy, become epileptic and apoplectic by a fright, a dream, or an immoderate exercise of these organs, faculties, and passions." 214.

It seems, then, that it matters little whether an organ be strong or weak, its susceptibility remains the same. If strong, it will be weak through excess; if weak, it will be overpowered by exercise. So much time has been already spent in criticising this *mensuration-system* that a very little more can be devoted to it; but we cannot avoid observing that our author is here treading upon dangerous ground. If there be any one truth in pathology more evident than another, it is this—that susceptibility increases as tonicity diminishes, and it is a fundamental dogma in dynamics, that the power of resistance is weakened by weakening the power of the resisting body. Now, if a temperament be the product of the excess of one organ or set of organs above another, of course the predominating organ or organs, which constitute this temperament, should form the strongest of the whole fabric, and should, therefore, be the last to allow the inroads of disease. If a muscle be much worked it becomes large and strong, but if neglected small and weak; if the lungs be moderately but constantly exerted they increase in size and force, and so, we believe, is it with every other organ and texture of the body. But to bear out M. Thomas's theory, the strongest must be the most, and the weakest organ the least susceptible, and not only so, but the strength of an organ's tendency to disease should be in an inverse ratio to its physical strength. To preserve consistency, then, first principles must be overturned, and the rules of science must be sacrificed to the whims of theory. If an organ be very susceptible to disease because it is weak, it is quite impossible that it also can be very sus-

ceptible to disease because it is strong; this is arguing in a circle, without cause or consequence.

When points are thus minutely examined their fallacy is soon discovered and easily exposed; but if a superficial view be taken of many parts in the *Physiologie des temperamens* they will appear plausible, if not true. Thus after endeavouring to prove in the first part that temperaments depend on organic and functional proportions, he endeavours to establish in the latter part that diseases are the consequences of these deranged proportions. When the habit is thoracic the diseases are acute, because the lungs are spacious and form a great quantity of blood, and because the heart is robust and circulates it actively; whereas when the temperament is cranial the brain becomes deranged from excess of action, but, as it is more obnoxious to inquietudes and causes of disturbance, its diseases may be as active, but they will be less regular. The great majority of affections, according to our author's doctrines, are acute. As they all originate in excess of action, they all depend on visceral congestion. The mode of cure which he recommends is, therefore, to diminish the exciting causes, and to moderate the action of the excited organs. To effect this in persons of the *cranial* habit the fatigues of study must be given up, passions must be moderated, exercise must be taken, extremes of temperature must be avoided, and a vegetable, or a very light animal diet should be used. When the congestion is great, general and local bleeding are necessary, after which antispasmodics may quiet the disturbance of the nervous system. The diseases of the *thoracic* habit being acute, the mode of treatment best adapted to them does not require specification. The *abdominal* temperament, he says, may be avoided or diminished by frugality, by indulging the passions, by studying closely, and employing active exercise. This regimen may succeed while the system is young, but if neglected to advanced life circumstances as numerous as they are irresistible will counteract its tendency, leaving nothing to be done but to prevent its increase and guard against its effects.

All this appears simple and probable enough *a priori*, and the facilities which it holds out to the changing and modifying of temperaments are encouraging. To convert the abdominal into the cranial temperament all the functions of the former must be discountenanced, those of the latter must be exercised. The mind must be stimulated by study, the passions must be strengthened by gratification, and such food must be taken as will inflame the blood already formed, rather than add to its quantity. Again, to convert the cranial into the abdominal temperament the reverse system must be pursued. The center of action may be thus variously changed, sensuality may take the place of intellect, and every bloated Bacchus may be made, according to our taste, Mercury, Orpheus, or Apollo. This is at all events a convenient system. The man, who is urged by misfortune into poverty, may take advantage of his circumstances, cultivate his cerebral powers, and convert necessity into a school-mistress. Every pauper, when he can do nothing else, may thus be made a Newton; and every workhouse may be converted into a parish-college!

Galen has said that the body of man is like Vulcan's forge, to which the anvil and hammer and bellows and fire were all equally necessary. So in man, if one system be removed or one organ engross the activity of the

whole, there can neither be harmony nor health. Such gross disproportion Nature has never been guilty of. She may make one organ somewhat stronger than another, or one tissue less susceptible than another. But that, which was constitutionally the strongest organ, may be rendered soon after birth the weakest, by not being introduced into circumstances favourable to its action; and the natural plus-susceptibility of a tissue may be lowered during life into moderation or deficiency. Original constitution may thus be altered by accidental causes, the center of action may vary its position from the head to the heart, or from the heart to the kidneys, and differences may occur after birth, in the powers and proportions of the system, infinitely greater than any which existed previously.

As the diseases to which the *melancholic* are prone, are more chronic than acute, and as the individuals, in whom this temperament prevails, are not remarkable for irritability, whatever treatment we pursue should be regulated under the knowledge of these circumstances. In many of them the most effectual means for their removal are moral and metaphysical. In hypochondriacism and mania, two of the most obstinate diseases to which man is subject, but little aid can be expected from medicine alone. Much depletion is not well borne; much excitement is improper. The body must be acted on through the medium of the mind, every amiable affection must be exercised, every social tendency must be stretched, amusement must be presented under every form, and every thing must be guarded against which might tend to encourage the favourite hallucination by which the mind is led astray. When medicine is given, it should be given cautiously; purgatives and local bleeding are the safest evacuants, narcotics are, perhaps, seldom, and ardent stimuli never useful.

In the other diseases of this temperament, the indications of cure must be formed and followed according to individual circumstances: but as a general remark it may be observed, that the obscurity and apparent mildness of the symptoms should seldom be considered indicative of either weakness of action, or deficiency of strength. Such symptoms are the effects of such a temperament, and the knowledge of this fact may prepare us for consequences which we might not otherwise expect. The symptoms are mild because the sensibility is low, their progress is tardy because the action is chronic, and the voice of danger comes too late because the vital functions being gently assailed are only gradually disturbed. This insensibility as to disease is usually attended with considerable passiveness as to treatment. The operation of medicine is often weak, the effect of treatment slow, and the physician is obliged to encounter the same resistance which the disease had at first to contend with, but has ultimately overcome.

These remarks reversed will apply with tolerable fidelity to the treatment of disease in the *sanguine*. Ardent in spirit and irritable in structure, weak impressions produce strong effects, action is easily kindled and rapidly proceeds, organization is soon destroyed and disease requires but little time to reach maturity. Treatment in such cases must be adopted early, and vigilantly pursued. Depletion must be liberally employed when necessary, mental excitement and physical stimuli religiously avoided when injurious. Every function is easily impressed, medicines operate in small doses, and the patient is soon saved from danger, or soon hurried to his grave. As the symptoms in the *melancholic* were chronic, they are here acute. If pain

be inconsiderable, action cannot be high; if symptoms be moderate, the danger cannot be great. In affections of this temperament, therefore, there is more to be feared from a sudden attack than a lengthened action, there is less deceit than danger, less to be dreaded from officiousness than neglect.

"It has been (says Trotter) unfortunate for the medical profession, as well as patients themselves, that persons labouring under nervous disorders have too much expected from the prescriptions of the physician and shop of the apothecary, what is only to be obtained from their own caution and circumspection. We thus find most of them ready and greedy to swallow every medicine that is recommended, but stubborn and intractable in all that relates to breaking in upon the established habits and customs, whether of luxurious living, depraved appetites, indolence of body or mind, or vicious indulgence of any kind inconsistent with health. Many of these habits, it is true, are so far interwoven with the constitution, as to make some changes almost impracticable; but as indisposition is so frequently brought on or aggravated by the improper conduct of the patients themselves, the physician cannot be too much on his guard in demonstrating to them all what belongs to their own government and demeanor. The medical adviser, therefore, who observes the most disinterestedness towards his friend, will often be the first man to be dismissed; while the selfish dissembler, however ignorant, will become a favourite, and engross the emolument. On such an occasion the virtuous mind of a liberal physician will know where to look for approbation."

To prevent diseases is the best way we know to cure them. When habits of idleness and luxury are firmly formed; when the system has become injured to favourite stimuli; when the drunkard cannot do without his bottle nor the glutton without his joint—the prospect of reformation is forbidding. Associations ardently cherished are to be broken up, and passions, which have ever proved the strongest in our nature, are to be overcome. To drink water instead of wine, to be limited to a simple dish, to labour several hours every day, to abandon every haunt of indulgence, to retire soon and rise early, are changes of the most repulsive character, and are more easily approved of than effected by the irresolute voluptuary. The nervous temperament is not natural to man as is the sanguine; it is the creature of abuse, and, therefore, cannot endure active measures. Depletion is badly borne; abstinence even moderately practised, is often attended with unfavourable consequences. As evacuants are the best class of medicines for the sanguine, perhaps tonics are the safest for the nervous. Their relaxed fibre, their enervated mind, their turbid passions, their debilitated functions, their whole constitutional *status* is the result of weakness, and can only be removed by communicating strength. Every plan by which tone can be imparted to the body, and firmness to the mind, should be judiciously employed.—Exercise properly conducted, amusements moderately enjoyed, temperance in rest, food, drink, and passions, tonics carefully administered, and, perhaps, sedatives and antispasmodics occasionally given, are the most promising means for accomplishing this object.

We have now brought to a close our observations upon *Temperaments*. We have examined their history—investigated their causes—ascertained the leading principles of their constitution; we have inquired into their connexion with mind—have defined the limits of their intimacy with matter—have shewn how they may depend upon both, and how original confirmation may be modified by accident; we have seen how they influence the

system in a state of health, giving to one energy of function and vivacity of thought, to another sensibility of body and volatility of mind, and to a third corporeal apathy, and metaphysical dulness; we have observed to what extent they favour the establishment, the character, and the progress of disease; in this system discountenancing its attack but encouraging its advancement, in that hurrying forward action to a crisis, and in another obscuring every symptom, and resisting every remedy; and lastly, the indications to treatment which they hold out have been examined. Did space permit, a subject so extensive might be more extensively pursued, but we believe the assigned limits have been already overstepped, and it only remains for us in conclusion to observe, that since temperaments stand very much at the mercy of circumstance, whether they be favourable to health or to disease, to happiness or to misery, to mental cultivation or to moral wretchedness, and since the nature and influence of these circumstances are very much under our control, the advice of Pythagoras, with respect to habits, may be applied as forcibly to temperaments: *Maximum vitæ genus eligite, nam consuetudo faciet jucundissimum.*

II.

LECTURES ON PRACTICAL AND MEDICAL SURGERY, COMPRISING OBSERVATIONS AND REFLECTIONS ON SURGICAL EDUCATION; ON THE INVESTIGATION OF DISEASE; AND ON THE ORDINARY DUTIES OF THE SURGEON: FORMING PART OF AN EXTENDED COURSE ON THE PRINCIPLES AND PRACTICE OF SURGERY, DELIVERED IN 1828 AND 1829. Illustrated by Engravings. By *Thomas Alcock*. Member of the Royal College of Surgeons, &c. &c. With coloured Plates, and with uncoloured: pp. 302. London, 1830.

IN a former number of this Journal we had an opportunity of speaking favourably of the talented and observant author of these Lectures, while reviewing his Essay on Medical Education in Transactions of the Associated Apothecaries. It is true, we differ from Mr. Alcock on some points connected with the apprenticeship system, and if we may judge by the following passage, Mr. Alcock drew a hornet's nest about his ears by the admonitions addressed to the masters or preceptors of apprentices.

"I soon found, that the fate of the *Miller, his Son, and their Ass*, in the fable, awaited my opinions on this subject.

"Some of my young friends who were apprentices, and not a few of others in practice, who had tasted of the inconveniencies arising from ill assorted engagements of this kind, wondered that I did not explode apprenticeships altogether.

"The greater part of masters (for the term preceptors did not suit them,) accosted me, 'A pretty piece of work you have cut out for us! Who do you think can submit to the drudgery of giving daily instruction to his apprentice! The idea is absurd!'

"Another class, and they were for the most part parents themselves, who had experi-

enced the anxieties, the arduous responsibility of duties for which no one can be too well prepared, greeted my efforts with their cordial approbation, and added, that they felt assured, had such a system of instruction been pursued in their own education, it would have saved them much valuable time, and have obviated many of the anxieties which they had suffered." 14.

In another part of the same lecture from which we have taken the above extract, Mr. Alcock acknowledges that a general practitioner, who is in any thing like good practice, has not time to study himself, or keep on a level with the progress of the literature, art, and science of the day. How then is he to pay all the attention which Mr. A. recommends to the studies of his pupils? We do not say that he ought not to give this minute attention to his apprentices. God forbid! We know that it is his duty, as a Christian, to prefer the good of others to his own, and therefore even at the sacrifice of emolument as well as time, he *should* do as Mr. Alcock desires. What is and what *ought to be*, are very different things. "Love thy neighbour as thyself," is a precept in the mouth of every one—but practised by nobody! We need not, however, dwell on this subject at present. This volume of lectures, although modestly intended for those who have not yet acquired experience, will be found to contain a series of most useful practical observations and instructions on the minor, but more common operations and duties of the medical practitioner, and more especially the general practitioner. The elementary nature of the work, and the great minuteness with which Mr. Alcock treats the details of medical and surgical practice—the investigation of disease—and the discrimination of its varying characters—render it quite impossible to attempt an analysis. The only portion of the volume which will bear this process is a section entitled:—

"OBSERVATIONS ON THE INFLAMMATIONS OF THE MUCOUS MEMBRANES OF THE ORGANS OF RESPIRATION," and to this we shall direct our attention.

Our author is convinced that the strict relations existing between these inflammations and some other diseases, especially measles, scarlatina, variola, and pertussis, have not been sufficiently considered by practitioners or pathologists. The following is the arrangement which Mr. Alcock proposes, founded on the situation of the parts affected.

"A. The nostrils, the fauces, and the mouth.

"B. The larynx; the top of the pharynx; as the latter is generally implicated in inflammation of the larynx.

"C. The trachea.

"D. The bronchia.

"To the above division A. appertain some forms of Catarrh, Aphtha.

"Cynanche tonsillaris.

"——— maligna.

"To B. Cynanche laryngea, or laryngitis; Cynanche Pharyngea.

"To C. Cynanche trachealis, or croup.

"To D. Bronchitis.

"To the second order B, (sometimes including the third and fourth, C and D,) chiefly appertain those accidental inflammations of these parts which occur in the Exanthemata, or rather, which, as far as relates to practical treatment, seem to constitute the essential part of the disease, the mere exanthema being for the most part subordinate importance. In the milder cases little is to be apprehended: but when the inflammation of a part of the mucous membrane is severe, it is more apt to run a rapid course when attendant on the

exanthemata, than under other circumstances. In these, as in the former class, each part may become the principal seat of the disease. In measles, small-pox, and scarlet fever, I have not met with any severe case, in which the mucous membranes were not implicated, and the proof, in many cases, has been rendered evident on dissection. Neither have I met with any case which terminated fatally, where, on careful examination, these membranes were found to be free from disease.

"If HOOPING-COUGH may be considered as a specific disease, it may be classed with the above; for, whoever will investigate it by pathological anatomy, will find that it is essentially an inflammatory disease of the mucous membrane, affecting the larynx, trachea, and bronchia: although in advanced stages the patients often die from the affection of the brain which supervenes. The opinions respecting *spasm* in this disease have done much to mislead the profession, and when, like many others, I acted upon the received opinions of the supposed spasmodic nature of hooping cough, I had often to regret the insufficiency of such medical treatment. I therefore determined to divest myself as much as possible of preconceived opinions, and to investigate the nature of the disease through the medium of pathological anatomy.

"I soon found that the usual mode of making the examination of morbid appearances, that is, examining only the head, the chest, and the abdomen, afforded no clue to the nature of the disease; and, though the lungs were generally more or less affected, there did not appear sufficient organic derangement to have produced death. I then determined to examine carefully the whole of the air passages, and there found sufficient to account for the death; for it became evident that it must have arisen from suffocation. The larynx, in every instance, afforded indications of increased vascularity, and the accumulation of mucus, or puriform fluid in the air passages, was sufficient to prevent respiration. These circumstances, collated with the symptoms during life, rendered it easy to conceive that the whole might be the result of inflammation; and the fortunate result of a mode of treatment founded on this principle, (as well as the repeated observation of the morbid appearances) have confirmed me in this opinion. Indeed, I may add, that it was the detection of this remarkable connection between these diseases and inflammations of particular parts of the mucous membranes which led me to more extended investigation." 118.

Mr. A. thinks that, by patient investigation, in any given case, the seat and nature of the disease will be clearly recognized—its degree of intensity ascertained—and an efficient plan of treatment indicated.

"It must be obvious to every one, who has at all minutely observed the phenomena of disease, that irritation or inflammation, either of the skin, or of the mucous membranes, produces an increased secretion or exudation from the affected part.—The former may be observed on the application of a blister, in scalds, erysipelas, &c.; the latter in cases of common catarrh, ophthalmia, gonorrhœa, dysentery, &c.

"We may observe in mild cases of the latter class, take catarrh for instance, that the first indication of local disease is uneasiness combined with some degree of swelling or distention of the affected parts, that this is followed by a thin liquid secretion from these parts; that the secretion becomes more tenacious, and, if the excitement have been sufficiently intense, is succeeded by a puriform discharge. As we observe that this progress takes place in a greater or less degree when the disease is left to its natural course, are we not justified in inferring, that the increased secretion is the means which nature employs for the removal of the disease, as dropsy appears to be one of the modes in which increased vascular fulness spontaneously terminates?

"Although the increased secretion from the mucous membrane lining the organs of respiration, is one of the modes by which recovery is effected, yet its excess, similar to what we witness in many dropsical diseases, is attended with great danger. No

sooner does the secretion into the air-passages exceed that which can be removed by exhalation and expectoration, than accumulation begins, and a part of the cells of the lungs, which should receive air, becomes filled with the secreted fluid; this increasing, must necessarily prevent the due performance of the function of respiration—that function without which life cannot long exist,—the blood no longer is changed from the dark or venous, to the vermilion hue, and the colour of the body partakes of the leaden or livid shade;—if the accumulation proceed, respiration becomes more and more obstructed, the phlegm, may be heard rattling in the air-passages,—and the patient sinks exhausted and suffocated.” 120.

In measles we trace the first appearances of inflammation in the watery and suffused eyes, the discharges from the nostrils—the sneezing, and other catarrhal symptoms, evincing phlogosis of the mucous surfaces lining these parts, while inspection shews its actual existence in the visible parts of the throat.

“Examinations of morbid appearances, after death, in cases of measles, have shewn the lining membrane of the air passages in a highly vascular and inflamed state; the air passages themselves filled in so large a proportion with mucus, or puriform fluid as to prevent the oxydation of the blood, and consequently, to destroy life. In cases where the disease has been more protracted, the air passages have not been filled with mucus, but chiefly with pus, sometimes mixed with air and mucus, extending throughout the most minute ramifications of the bronchia, and rendering a great part of the lungs much more dense than in the natural state.

“The lungs themselves have less frequently exhibited signs of inflammation; at least, those recent adhesions of the pleura, so commonly met with, have rarely appeared. So decidedly has this been the case, that I have known several instances where the examination of the head, the chest, and the abdomen, have afforded no satisfactory explanation of the cause of death, until the larynx, trachea, and bronchia were examined, when the cause of death became apparent. In some cases, sloughing of the tongue or fauces has intervened; and I have known more than one instance where ulceration of the larynx had taken place. In one case, a considerable part of the epiglottis was destroyed by ulceration, and as might be expected, every attempt to swallow, particularly liquids, produced great distress, and violent cough, almost bordering on suffocation.” 122.

The greater number of the tracheal and bronchial affections in the advanced stages of measles assume the acute form, and require very active treatment. Mr. A. has seldom found the mucous membrane of the alimentary canal with the exception of the pharynx, affected in measles. The brain is less frequently affected than in hooping cough.

From these observations the principal indications of treatment will hinge on the moderation of general febrile symptoms, and the removal of the inflammation of that particular part of the mucous surfaces which is the chief seat of the disease. Mr. Alcock candidly observes, that the means of treatment must be left to the discretion of the individual practitioner, the grand object being to subdue the disease by the mildest means consistent with the welfare and safety of the patient.

SMALL POX.

“It is sometimes of use to trace the steps by which any useful discovery has been made, or any practical fact has been ascertained, as it will generally be found, that whatever has been useful, has been the result of induction from the accurate observation of obvious, and frequently of well-known facts.

"Several years ago, and previous to my residence in London, my attention had been directed to the puriform discharge from the internal ear, from having observed a case or two which had terminated fatally, with well-marked symptoms of affection of the brain. On tracing a number of cases, I found that they had generally originated in, or followed some acute disease, such as measles, small-pox, or scarlet fever. This circumstance led me to examine the internal ear, when inspecting the morbid appearances after death, and I soon found, that in almost every fatal case of the above named diseases, there was more or less of effused fluid in the cavity of the tympanum, which varied from the appearance of a thin and bloody mucus, to that of well-formed pus; the membrane of the tympanum remaining entire.

"It scarcely appears necessary to notice, that in the year 1812, on presenting a paper, *On the purulent discharge from the Ear*, to the Westminster Medical Society, I illustrated this fact by a recent preparation of the temporal bone, removed from a patient who had died of confluent small-pox, shewing the cavity of the tympanum filled with pus. As might be expected, I invariably found this state had been preceded by considerable mischief in the throat, in many instances even to the throwing out of coagulable lymph on the surface. The similarity of this adventitious production to the membrane of croup, and the invariable affection of the larynx and pharynx, as exhibited by dissection, soon convinced me that the immediate cause of death was suffocation, and the further examination of the air passages, confirmed me in this conviction. This fact of similarity of diseased action in parts so essential to life, required no great ingenuity to be reduced to practical use. Notwithstanding the prevailing opinion that confluent small-pox was a disease of debility, of putrescency, &c. yet if the inflammation of the internal organs produced death in croup, and the morbid appearances in confluent small-pox bore a strong resemblance to the former, I could not see why the treatment of small-pox, as a decided inflammation, should not be as efficacious as that of croup; in which, decisive antiphlogistic measures, if used sufficiently early, seldom fail to remove the disease. I determined to put it to the test, and the result exceeded my warmest expectation; and some of my professional friends have since used the same plan with equally happy success. Perhaps some may consider the fact as of little importance; I can only state my belief that in very many instances it has been the means of saving the lives of individuals who have been under my care, and who, I am persuaded, would not have recovered under the usual mode of treatment." 125.

Mr. Alcock appears to think, and we agree with him, that what have been termed pustules on the mucous membranes, in small-pox, ought to be termed aphthous ulcers. After detailing the dissection of a case of confluent small-pox which terminated fatally, and where the trachea and bronchia were filled with greyish puriform matters, while the larynx and pharynx were swollen and covered with coagulable lymph, the œsophagus, stomach, and intestines being pale and free from disease, Mr. A. concludes thus:—

"The treatment of small-pox upon the principles above described, forms so good an illustration of the value of those principles when reduced to practice, that I cannot refrain from recapitulating, as a general fact, that the danger of small-pox has been in the ratio of the laryngeal, tracheal, and bronchial inflammation, and that this inflammation has usually borne a strict relation to the aphthous eruption, (or what would have been pustular eruptions if situated on the skin,) which are to be found in the throat. A reference therefore to the state of the throat in the earliest days of the eruption, has formed an almost unerring guide to the future practice, and in nearly all cases of confluent small-pox, when seen thus early, a decidedly depletory and antiphlogistic system of practice, has conquered the disease, and saved the person's life. So certainly has this treatment answered the intended

purpose, that in many cases the disease has been cut short, the eruptions have run through their course more rapidly than under ordinary circumstances, the secondary fever, as it has been called, has not occurred, and the person's countenance has been left free from pits, or the marks have been comparatively slight." 129.

SCARLET FEVER.

Mr. Alcock thinks that the mortality in this disease has been considerably over-rated—although, in this opinion he is aware that he differs from authors of great talents and experience. But the fact is, that we may live a long time and meet with few bad epidemics of scarlet fever; but when the malignant cases do occur, they defy the best and most energetic modes of treatment.

HOOPING-COUGH.

"The symptoms attending this severe and often fatal disease are known to almost every one, so that detailed description of them is unnecessary. The great severity of the paroxysms when the disease is fully formed, and the immediate relief which follows the expulsion of the tenacious matter which is expectorated, or often swallowed by young children, are generally sufficient to distinguish this disease. The early symptoms are so perfectly similar to those of common catarrh, that I know of no diagnostic by which they may be discriminated. Catarrh is as obviously an inflammation of a mucous membrane as is gonorrhœa;—what then should induce us to consider hooping-cough as a spasmodic disease, because the muscles of respiration are occasionally called into violent action. As well might we designate the violent efforts which instantly occur on any extraneous body entering the glottis a spasmodic disease; and with equal wisdom to the spasmodic treatment of hooping-cough, set about treating the spasm, regardless of the cause which produced it, and leave the morsel in the larynx till the patient was suffocated; and then console ourselves with the reflection, that although the patient had died, the friends had the satisfaction of knowing that *every thing had been done which could be done*; and thus go on with the next and the next. I have repeatedly ascertained, by dissections of patients who have died of hooping-cough, that the larynx invariably exhibited signs of inflammation often to so great an extent as by its swelling to close mechanically the glottis;—often the exudation of coagulated lymph was found near the larynx; the mucous or lining membrane of the trachea and bronchia was much increased in vascularity, and the cavities of the latter were filled with fluid more or less mixed with air,—the appearance of the fluid varying from that of thin mucus to perfectly formed pus.

"With these facts as a basis, is it unreasonable to suppose that the inflammation of the mucous membrane lining the various parts of the organs of respiration, should produce the tenacious mucus, which is from time to time expectorated? that the accumulation of this matter impedes respiration, and acts as an extraneous body upon the larynx; that the cough is a mere natural effort to expel the offending matter, and its violence is in direct ratio with the tenacity of the phlegm secreted;—as we often find that spontaneous vomiting frequently terminates the paroxysm, by bringing away the secretion adhering about the top of the larynx, and which the cough had not been sufficient to dislodge? This irritating cause being removed, there is soon a cessation of all the urgent symptoms until its accumulation, or other accidental cause, produce the recurrence of paroxysm. If the disease be not subdued, either by natural means or by appropriate remedial treatment, the excessive secretion continues, accumulation takes place in the bronchia and in the air cells of the lungs, and consequently the blood is prevented from that intimate contact with the air respired, which is so essential to life, that the continuance of this state terminates in suffocation.

"The treatment must not be confined to the mere alleviation of symptoms, but must, to be successful, strike at the cause. When the inflammatory affection is such as to call for further measures than those of regimen, temperature, &c. depletion, active depletion, must be used;—and frequently the combination of blood-letting, both general and local, will afford more relief than either of them separately. These measures will be greatly assisted by such remedies as tend to restore the equilibrium of the circulation—the distribution of blood generally being in excess in the internal organs, and deficient in the skin and contiguous parts. The occasional exhibition of emetics is also of use, and still more particularly such medicaments as produce a copious mucous secretion from any large surface of the mucous membranes, as those of the stomach and intestines." 133.

We have thus given an analysis of the only part of Mr. Alcock's work which is susceptible of analysis. Our readers will judge from this specimen of the general value and tenor of the volume under consideration. We have no doubt that these lectures had a better effect during oral delivery, than they will have on perusal. The language is often diffuse and colloquial, far better suited for the theatre than the closet. Mr. Abernethy's lectures afforded an excellent illustration of this remark. None were more popular in the class-room—none more disappointing when committed to the press.

III.

A TREATISE ON HYSTERIA. By *George Tate*, Member of the Royal College of Surgeons. 8vo. pp. 134. Highley, 1830.

An ignis fatuus that bewitches,
And leads men into pools and ditches.

HYSTERIA has certainly bewildered the practitioner as much as any disease in the extensive catalogue of human infirmities;—but as it is not considered dangerous, and as it assumes so many different shapes as to be almost indescribable, it has not hitherto obtained the honour of monography in the English language. Mr. Tate's endeavour to draw attention to a malady, which is a kind of epitome or imitator of all the other diseases to which flesh is heir, deserves, and will, no doubt, receive, the serious consideration of his brethren. The following quotation from the opening of the second chapter, will probably be objected to, as simplyfying too far the etiology of hysteria.

"With the exception of those cases, real or affected, which are so frequently occurring in what have been called 'the refined circles,' occasioned sometimes by sudden impulse, and sometimes by mere caprice, Hysteria, in all its varieties, whether it be mild, yielding to a brisk cathartic potion,—whether it be of another form, lasting for weeks,—or whether it be more obstinate, persisting for months, or even years,—has one common cause which is essential to its appearance; namely,—an irregular or defective menstruation. Since I have been attentive to cases of Hysteria, I have never seen one, (with the above unimportant

exceptions) either of a simple or a complex character, in which there did not co-exist distinct traces of a faulty menstruation. There is always some deficiency or some depravity of this secretion: it will be found sometimes altogether suspended; sometimes redundant, or too frequent in its recurrence; sometimes dark and grumous; at others, pale and watery; sometimes it is attended with agonizing pain and sickness. Sometimes, also, Hysteria will take place previously to, and be indicative of, the first appearance of the menses; and sometimes it will occur when these are about to be no more seen. The common conditions, however, under which Hysteria prevails, are catamenial suppression, insufficiency, or depravity." 12.

The author will not positively deny that hysteria does not take place in men; but he has never seen such a case, and reasoning induces him to doubt its existence. He thinks it probable that such instances as are on record, were cases of chorea, and not of hysteria.

"Debility produced by, or at least combined with, a deranged state of the stomach, liver, and bowels, certainly predisposes to Hysteria; and delicate females, who are easily excited, are more susceptible of it than the robust; but there is still something wanting to account for the singular phenomena that this affection exhibits. These phenomena are different from those presented by any other disease: they are perpetually changing their character,—adopting the image of the most terrific maladies,—and are scarcely ever seen in two cases precisely alike. The cases to be afterwards adduced, will, I think, prove conclusively, that defective menstruation is solely accountable for all these manifestations, whatever may have occasioned that function to be deranged. I assume this, because, in the first place, Hysteria is not confined to women of a delicate texture, but sometimes attacks the most hardy and the most healthy; and secondly, because a suppressed or disordered uterine secretion is always the forerunner of it, in whatever shape it presents itself." 14.

In the third chapter, Mr. Tate divides hysteria into three degrees of intensity. The first or mildest degree occurs almost invariably between the ages of 13 and 45—is always accompanied by some irregularity of the menstrual discharge—and often by disorder of the digestive organs. The characteristics are well known—alternate fits of weeping and laughing—starting and screaming—death-like stillness and gigantic struggles—clangor intestinorum, globus hystericus—pale urine, the latter not constant. For the cure of this degree of hysteria, the most nauseous drugs selected from the three kingdoms of Nature, have been freely administered, and "as hysterics are occasionally brought on by passions of the mind, the patient had only to make her election, either to exercise at once a becoming control over herself, or indulge her sensibility at the expense of being drenched with the most suffocating liquids in the world, and of having her convulsions of caprice exchanged for convulsions of disgust." In such cases, the penalties may (he thinks) be well incurred, and may perhaps tend to induce susceptible young ladies to divest themselves of fanciful illness. We are not, however, quite so well satisfied as Mr. Tate seems to be, that even this first grade of hysteria, is ever actually *fanciful*. If the corporeal disorder arise from mental emotions, it is as real while it lasts, though not so difficult to conquer, as when resulting from uterine irregularity. But as Mr. Tate admits that this first grade of hysteria, exhibiting, indeed, its simplest form, may "arise from some mental emotion, where there is clearly *nothing wrong in the animal functions*," the admission is fatal to his etiological conclusion, that hysteria is essentially dependent on "irregular or defective menstruation."

If a mental cause can produce the disease in one degree of intensity it will be difficult to persuade the profession that the same cause may not be adequate to the production of a higher grade of the malady. Mr. T. protests against the utility of the foregoing remedies in the more common forms and degrees of hysteria, where the disorder is connected with a corporeal malady.

"The first object, in the treatment of this form of disorder, is to cleanse the bowels; and this is most effectively done by a brisk cathartic of calomel and jalap, followed by castor oil. In a great majority of cases, a brisk action upon the bowels will be attended with immediate relief of the fits or paroxysms, or whatever else they may be called, and they will rarely return if the subsequent practice be judicious; which consists merely in avoiding stimulants; in living on a bland and nutritive diet, and taking aloes and iron with some aromatic oil, until the uterine and alvine secretions are properly regulated. It has frequently happened, in the course of the few years that I have been in practice, that after having relieved a young female from the immediate attack, I have represented to her mother the necessity of repairing the deranged state of her general health; and those girls who have been for years deprived of their natural health, going about with sallow and sickly faces, parched and pallid lips, furred tongues, and limbs incapable of the least exertion, have been indebted to a few doses of calomel and jalap, followed by pills of aloes and iron, for the perfect re-establishment of their strength, health, and beauty." 19.

This treatment, however, will only apply to the first degree of hysteria occasioned by "over-excitement of mind and nothing more"—but where the fits recur frequently, and where "the general health and uterine secretion are found to be deranged—the same treatment is not only useless and unreasonable—it is positively mischievous."

HYSTERIA OF THE SECOND DEGREE.

This is of much more serious consequence than the former. It generally arises suddenly, with some singular and unaccountable symptom, very alarming to the patient's friends, and occasioning the sudden summons of the medical attendant. If he be not on his guard, he will be very apt "to mistake this disorder for some real disease or some active internal inflammation. He may thus do more mischief than all his subsequent treatment can repair." We shall abbreviate a case or two in illustration.

Case 1. A. W. aged 19 years, a rosy-cheeked healthy-looking girl complained, on the 22d April, of violent pain in her eyes, which seemed inflamed, and discharged a copious flow of scalding tears, with extreme intolerance of light. This had come on without previous shivering or other warning, a few hours previously.

"The conjunctiva was about as much injected as it is generally after a violent fit of crying. She was immediately bled from the arm; and after losing about eight ounces of blood, she opened her eyes, and declared she could see as well, and bear as much light as ever she could in her life. The pain, also, was nearly gone; and this without any fainting or any perceptible tendency to it. She was then ordered to go home, to keep quiet, and to live low for a day or two; calomel and jalap, with sulphate of magnesia, were also prescribed for her. At about four o'clock on the following morning, I was called up to go to her immediately, (six miles into the country) as the people about her declared she must die, un-

less she could obtain instant relief. I found her seemingly in agonies. Her eyes continued well; but she was breathing with such excessive rapidity as I can only compare with that of a hound after a hard run, and with much the same kind of muscular distress. Her hand was pressed firmly against her left side, beneath the breast, where her gestures (for she could not speak,) signified that she was suffering acute pain. It was impossible to ascertain the state of her pulse, in consequence of the agitated state of the respiratory system, to say nothing of her terror; but her chest sounded well, and she was in a profuse perspiration, attended with high heat of the whole surface of the body. Upon inquiry, I found that she had not menstruated for fourteen weeks, and for more than twelve months very inadequately to her former habits; and had complained of pain in her left side, with occasional palpitations. These circumstances shed some light upon the rather puzzling appearances of the case, and went a great way to determine its real source and character. I then had her turned round, to get an examination of the spinal column. On making pressure upon the four uppermost dorsal vertebræ, she complained of great tenderness, and pain; which was referred to the left side, and to the scrobiculus cordis. As I had always found these, or some other divisions of the spine, tender, on the application of pressure, in urgent cases of Hysteria, I was quite satisfied that this was nothing more than a mysterious case of that description. The fugitive nature of the apparent ophthalmia, the seat and kind of pain in the left side, the pain in the dorsal vertebræ, with a suspended menstruation; all concurred in giving it this and no other character. Although not expecting much benefit from it, at the solicitation of friends, she was again bled, with scarcely any relief. The treatment which I chiefly relied upon was the tartar emetic ointment to the spine. This was applied along the whole course of the dorsal vertebræ, three times a day; and she took calomel and cathartic extract, followed by an aloetic mixture, every four hours." 24.

Dark and offensive evacuations followed, and the pain and quick breathing were relieved. When the tartar-emetic had produced a copious crop of pustules the other symptoms gave way, and she gradually recovered health and strength under the use of aloetic medicines with steel. But the catamenia did not appear, and at the end of six weeks, she was again attacked in a precisely similar manner. The tartar-emetic was re-applied, and again she recovered. Under the use of aloetics she at length menstruated, and there was an end of the business. The next case we shall give in the author's own words:

Case 2. "Miss W., aged 15, was taken ill at a boarding school, in April, 1826. For a few days she had complained of head ache and loss of appetite; and without any further warning, awoke on Sunday morning, after a tranquil night, with a train of symptoms resembling Tetanus. Her governess sent to me in great alarm. The following was pretty nearly her condition when I first saw her: she was lying upon her head and her heels, her back being thrown into an arch, and scarcely touching the bed-clothes. Her arms were flexed and rotated inwards; her fingers violently closed, grasping her thumbs, which were stuck into the palms, in a way that is frequently seen in hydrocephalic children. Her toes were bent inwards, and her legs bent and twisted in the same manner as her arms. It was with great difficulty that her hand could be forced open, although the attempt did not much annoy her. She was perfectly sensible, and complained of violent heat and pain in the head. Intolerance of light was very great, and when her eyelids were opened, she squinted frightfully. Her respiration was short, and she complained of pain in the side, and palpitation. Her pulse was 110; her tongue clean; skin hot, but covered with moisture; she was thirsty, and said her mouth was dry. Her general health had been previously good. She had never menstruated. Such was the striking appearance of the case; which,

from the suddenness of the attack, after passing a good night, and from her having never menstruated, with the corresponding symptoms, I strongly suspected was nothing more than a strange form of Hysteria. Under this impression, I examined the spine, and the moment pressure was applied between the scapulae, upon the upper dorsal vertebrae, the patient complained of pain, which was also manifested in the shrinking expression of her countenance. That which was conjecture before, thus became matter of certainty, and I felt myself warranted in assuring the governess, who was naturally in considerable alarm, that these formidable symptoms were mere phantoms, which would readily disappear; and that a few days would, probably, be sufficient to restore her to her usual good health. The infraction of the tartar emetic was immediately begun throughout the dorsal region; and calomel and jalap were prescribed for her. As soon as the bowels were freely evacuated, her head was better, and respiration was relieved; but the spasmodic, or rather, tetanic affection, did not yield at all. In about thirty-six hours, the antimonial ointment had accomplished its duty; when the spasm was immediately influenced, the flexors gradually relaxed, and, in less than twenty-four hours after the pustulation was developed, not a vestige of the disorder remained. The contractions returned twice or thrice, to a partial extent, in the course of the following month; sometimes one thumb, and at another time one or two fingers, being bound down; and, upon one occasion, this lasted for several days; when a second application of the ointment was, very reluctantly, consented to. She had, afterwards, no return of pain or disorder. During the whole of this time, aloetics, with iron, were daily administered; and, at the expiration of five weeks from the accession of her illness, she menstruated; and was afterwards quite well. Thus proving, very satisfactorily, that the amenorrhoea was the source of the vertebral irritation; and that this, in its turn, produced the other ailments." 29.

Case 3. This was also a young lady, who had been out of health for four years. When first observed by Mr. Tate, she had acute pain in the left side, increased on inspiration but relieved by pressure. She also complained of pain in her head and oppression about the chest. She would occasionally fall down apparently lifeless, and lie so for half an hour, recovering at intervals and then speaking rationally. When seemingly comatose, her breathing would be suspended for ten minutes or longer at a time, or carried on with such subtleness that no air escaped her lips. Then a rapid gasping would follow, to be succeeded by another death-like stillness, &c. All this time the pulse was quiet and regular. She entreated Mr. T. to bleed her, which he did, suspecting that there was some disease of the heart; but he soon saw the case in its true colours. Having convinced himself that there was no disease of the head or thoracic organs, he proceeded to examine the spine, where he found uneasiness complained of when pressure was made on the dorsal region. "Upon increasing the pressure, the pain was increased, and passed through to the pit of the stomach and to the left side, at the spot so complained of—causing the breathing to be oppressed." The catamenia were found to be unusually scanty and dingy. The antimonial ointment was applied to the spine, and as soon as the eruption came out the relief was astonishing. "The fits went off, the head and side were no longer complained of, and the palpitation gradually subsided."

Case 4. "Elizabeth M., aged 20. Early one morning, I was sent for to this young woman, and found her in bed, where seven or eight persons were employed in keeping her by main force. She had complained for some days of a bad head-ache; was of a pale, delicate complexion, of a very slender frame, and had been for many months without any

uterine evacuation. She had waked in the night, screaming out like a maniac, to the terror of all the family; and, in attempting to get out of bed, had fallen back in a state of insensibility, and had continued so up to the time of my arrival. She was struggling with amazing violence; her eyes were staring wildly—she was grinding her teeth,—her hands clenched, and every muscle of the body seemed to be thrown into a state of the most tremendous spasm. This was Hysteria, clearly enough. So far there was little difficulty in deciding. Her pulse being rapid and bounding, some blood was drawn, but without affording her the smallest relief. Calomel and jalap were, with some difficulty, forced into the stomach. When these had copiously relieved the bowels, she became calm, and the convulsive throes ceased; but the insensibility was unabated, and she lay like a girl perfectly dead, till the middle of the following day. I had already begun the tartar emetic inunction, and when she was sufficiently sensible to answer, I traced the course of the spine, and she complained and shrunk away when the fingers were applied upon the dorsal vertebræ.—The pain was felt through the whole chest, particularly at a spot beneath the left breast.—Indeed, I have scarcely met with a case in which the spinal affection was more strongly and clearly marked. Besides the tenderness of the spine, and the pain in the left side, there was, in this case, excessive tenderness in the right side, under the margin of the ribs; this was so great, that she dreaded the slightest manual examination, even before she was touched. The pain was confined to the hepatic region, but was too acute and too superficial to induce a suspicion that it was connected with visceral disease. It was, as well as that of the other side, occasioned by the spinal disorder; and as soon as this was relieved by the usual application of the ointment, and the menses were restored by the usual combination of iron and aloes these pains were dispersed, and the young woman afterwards acquired greater strength and better general health, than she remembers to have enjoyed at any former period of her life. This, as I before remarked, has been the usual result of Hysterical cases, treated in the manner above described." 35.

The symptoms of hysteria of the second degree are thus adverted to.—*First*, there is defective menstruation. This our author considers as the "head and front of the case"—the original cause of the disorder. The *next* circumstance, "and the most important of the whole list," is "distinct pain upon the application of pressure or of heat, to three or four of the six superior dorsal vertebræ." Upon this point the author desires to fix the attention of his readers—"for this spinal affection, whatever its intrinsic quality, is clearly chargeable with most of the curious images, and fantastic forms, that Hysteria is accustomed to put on; and yet, notwithstanding its constant occurrence in these forms of Hysteria, and its frequent existence where there is even a *tendency* to Hysterical disorder, it is a circumstance that has been overlooked by those who have professed to treat upon the subject, as well as by those who, for the sake of gratifying curiosity, have published detached cases of Hysteria under various other designations." In other parts of the spine, especially in the lumbar vertebræ, pain is frequently complained of; but in the dorsal region no uneasiness is usually felt till pressure be made. Proceeding downwards along the spine, the patient shrinks when we reach the dorsal vertebræ, and she acknowledges the existence of pain, which sometimes, not always, shoots through the chest or to the left side, sometimes to both, generally oppressing the breath. Mr. Tate does not attempt to account for this curious phenomenon. He contents himself with stating the fact, leaving others to unravel its philosophy. Fortunately, or unfortunately, no opportunity of examining the spine, *post mortem*, has oc-

curred among his hysterical patients; and therefore, the precise pathological condition of the part must be matter of conjecture.

The pain in the left side is next to be attended to.

"It is usually situated immediately below the left breast, in a hollow formed between the cartilages of the fifth and sixth, or six and seventh ribs; it is generally so circumscribed, that it may be covered by a shilling; and is of the gnawing kind. Occasionally, however, it is most acute, feeling as if a knife were being stuck into the spot, and the patient cannot forbear screaming. This pain is complained of for some time before the invasion of the Hysteria. The patient is often observed to incline the upper part of the body to that side, dropping the left shoulder, which relaxes the painful part and affords some relief. The act of raising the left arm above the head, or of bringing the body into a perfectly erect position, is attended with an increase of pain. I apprehend this pain is really seated in the intercostal nerve, although I have sometimes thought it must be situated in the nerves of the heart itself; as it is difficult to account for its perpetual preference for the left side.—The right side, certainly, is often not exempt from pain; but, in nineteen cases out of twenty, the prominent grievance is in the former; and in the like proportion of instances, I can put a finger on the spot with as much certainty as if it were visibly marked." 43.

Mr. T. is convinced that many spinal curvatures have arisen, in consequence of this pain, causing a tendency to lean the body constantly towards the affected side.

Palpitation is another symptom which is almost always present. So is pain in some part of the head, generally in the front or occiput, or both.—Globus hystericus though not always present, is very often so.

HYSTERIA OF THE THIRD DEGREE.

It has been stated that the various forms of this kind or degree of hysteria, appear to be caused *immediately* by the spinal affection, which, in its turn, is the result of some occult association or sympathy between the spinal cord and the uterus. We have, therefore, two indications to fulfil—the removal of the immediate cause of the hysterical evolutions; and the restoration of uterine vigour and health. The modes of accomplishing these objects are fully pointed out in the cases above detailed.

"In some instances, where the patient is very robust,—the cheeks highly flushed,—the eye injected,—the forehead red and polished, it may be useful to abstract blood by the lancet; but it rarely does much good, and, as far as I have seen, never relieves the immediate attack. But when symptoms so sudden and alarming make their appearance, a medical man is expected to do something *instantly*; and in strong young women, bleeding does no harm. In delicate girls, on the contrary, it aggravates the disease tenfold; and renders the cure infinitely more difficult and tedious than it would otherwise be. As a general rule, therefore, venesection should not be performed, without some very substantial reason. It neither removes the pains, nor the spasms; but very often prolongs both." 47.

Having made a careful examination of the spine, and ascertained the seat of pain, the first thing to be done is the application of the tartar emetic, either by friction or plaster on the spot. If the symptoms be urgent, whether cataleptic, choreiform, tetanic, hemiplegiac, or Protean, the application should be carried along the whole course of the vertebræ—and this should be done every six or seven hours, until the pustulation is fully developed.—"The hysterical symptoms will then yield, and the patient will become

calm and sensible." But, as the cause of this spinal affection, the uterine disorder, is still in operation, it is sometimes necessary to establish the eruption, *iterum iterumque*, in order to secure the patient from relapse.

Leeching has always failed to relieve the spinal tenderness in our author's practice, and the same may be said of blistering. Purgatives are necessary, as auxiliaries. The evacuations are generally black and unhealthy at first.

"We have thus disposed of the immediate attack; but another important indication in the treatment remains to be considered. This is to re-establish a healthy and vigorous menstruation. Now the mal-performance of this important function may be of several different kinds; it may consist in absolute suspension or suppression; in being before or beyond the usual period; in being of a dark and grumous, or of a very pale complexion; in being too copious or too small in quantity; or in being attended with excruciating pain. Such being the various states of disorder, it will be seen how impossible it is to lay down any rule of treatment that can be universally applicable. Each must be separately considered, and treated according to the discretion of the practitioner, upon the usual principles; in first of all, improving the secretions, and placing the digestive apparatus in a state of reparation. After this has been effected, wholesome air, wholesome food, and wholesome exercise, with preparations of iron, and the use of the warm, tepid, cold, or shower bath, according to the circumstances, will generally be the best tonics, and restore the patient to her usual health and strength." 51.

Mr. Tate next introduces a number of cases, chiefly from the MEDICO-CHIRURGICAL REVIEW, where the patients evidently laboured under hysteria, but where the diseases were designated by various appellations, according to the fancy or judgment of the practitioner. The criticisms on these cases are judicious and candid. The perusal of them will be advantageous to the reader.

With the following graphic sketch of the symptomatology of this third degree of hysteria, we shall close this section.

"As there is no regular set of symptoms that admit, as in common diseases, of being set forth as universally present to mark its nature, I must content myself with a general description of this form of Hysteria, leaving the body of the picture to be filled up by a report of cases. As before stated, in the most tedious form of Hysteria, menstruation is always more or less faulty at the onset, and as the case advances, this becomes suppressed altogether, or is performed very sparingly, perhaps only once in many months, and then with great pain. Where this function is quite suspended, there is, generally, neither any periodical pain, nor any sensation, to show that nature had not forgotten this customary duty. Shortly afterwards the patient becomes weak and desponding, loses her appetite, and the bloom from her cheeks. She has still nothing particular to complain of, and, generally, keeps up her flesh, although it has every appearance of relaxation. If a medical man sees her now, he will find her with a moist and tremulous tongue; being foul at the root, and having the papilla, at that part, larger than natural, and like little tubercles, with a tainted breath; depraved taste; little or no appetite; with a weak, languid pulse; with a sickly, yellowish complexion; black or clay-coloured alvine secretions, and the urine highly coloured and scanty. In a little time, she will have pain under the left breast; which is increased by deep inspiration, and by reclining upon that side,—sometimes pain also in the right side, palpitations, flutterings, sinkings, and, together with these, there will be pain upon pressure in one or more parts of the spine: first of all, in three or four of the dorsal vertebrae; generally, also, in the lumbar, and, if the case be very lasting, it sometimes extends up to the very summit of the cervical portion. In such cases, the head-aches are

intolerable; being in some instances constant, in others interrupted, but always violent. The pain is often continued down the arms and into the legs; the extremities are generally clammy and cold.

"In the midst of all this, the patient is not much reduced in flesh, and, for a considerable time, it is not sensibly diminished. As the disease advances, a number of anomalous pains of a neuralgic character, become associated with the other symptoms. Thus, if pressure be made upon the supra or infra-orbital nerves, upon the inferior maxillary, &c. as they issue from their foramina, considerable pain is produced, but I never found these spots complained of, in the absence of such pressure. It is not, however, the facial nerves that are alone implicated, for almost every nerve in the body becomes at the same time, endued with a similar increase of sensibility. This sort of neuralgic affection is seldom observed until the case is far advanced, and has become equally inveterate and puzzling.

"A condition of this kind will frequently prevail for eighteen months, before any particular notice is taken of it by the patient, or her friends: she gets gradually worse, until some sudden spasmodic affection, or other unaccountable symptom, commands attention; and then medical advice is obtained. At other times, where more solicitude is felt, earlier application is made to the followers of the healing art; and the patient is called a dyspeptic, or a hypochondriac, or a nervous lady; and, if judiciously treated, will gradually recover her health." 93.

A remarkable and protracted case is next detailed, of which we can only give some of the more prominent features in this place.

Miss ——— became our author's patient in March 1825, after ten years' illness, and having been under a pretty long list of learned doctors. She had menstruated at fifteen, and her illness commenced soon afterwards with a total suppression of the catamenia, referred at the time to cold. She was now so weak as to be incapable of walking across the room. Her complexion was sallow—her lips bloodless—pulse small and quick—tongue furred—bowels torpid—dejections various but morbid—urine clear.

"There was a fixed and lancinating pain in a hollow, between the cartilages of the fifth and sixth ribs of the left side; pain under the margin of the ribs of the right side; considerable difficulty of breathing, and frequent violent palpitations. The head-aches were almost incessant, and often nearly distracting by their violence. There was pain upon pressure throughout the cervical and dorsal vertebræ; and pressure between the shoulders, aggravated the dyspnœa. She was sometimes seized with an uncontrollable vomiting, which lasted seven or eight days together; at which times, not a spoonful of cold water would remain upon her stomach; these attacks were ultimately tranquillized by opiate suppositories, leaving her strength completely prostrate. She scarcely ever closed her eyes to sleep although her sufferings were so great, that she was lying in a recumbent posture, at times for days and nights together, with her eyes shut in silent agony. She appeared literally not to eat anything. *She had not menstruated since the beginning of her illness, when she was near sixteen years of age.*

Slight vexation or surprize threw her into a paroxysm of hysteria. A tartar-emetic plaster was applied to the spine, which occasioned great distress, and as sickness came on about this time, it was placed to the account of the plaster. Mild aperients were given, and she gradually regained a little strength. As she improved, the carbonate of iron was cautiously tried, but brought on the sickness again, and was discontinued. She went to Cheltenham, and a caustic issue was established over the seat of pain in the side, without effect. "After a short interval, the carbonate of iron was

again taken, and it now did not appear to offend the stomach. The quantity taken at each dose, was increased, by slow degrees, from a scruple to half an ounce, three times a day; so that, at last, she may be said to have lived upon iron." Under this plan she rallied wonderfully. The pain was relieved—the bowels acted favourably—the head-aches were trifling—and the spinal tenderness scarcely perceptible. The catamenia returned once, and then ceased. She was able to walk and ride. She went to Bath, where a surgeon bled her once a fortnight, for a whole year. She returned to Cheltenham, and presented the following phenomena.

"She had now an irregular pulse—violent palpitations—œdematous legs, even to the knees—cold extremities—shortness of breath—and a countenance indicative of exhaustion and distress. The left breast was very much wasted, as were also some of the muscles on the side of the chest: producing a degree of deformity, that was evident through her clothes. I earnestly entreated her to subject herself to no more such ruinous experiments; but to take wholesome food—to take as much exercise, as her strength would bear, short of fatigue; to take no medicine, but a tonic-aperient pill; and to use the shower bath twice, and the warm hip-bath, three times a week. She then proceeded to Leamington, where she has followed these directions. Her health improves, but the wasting, and numbness, of the left breast and side, are making gradual progress. There appears little hope of her complete recovery, although she has already endured little short of a quarter of an ordinary life of diversified suffering." 99.

Mr. Tate thinks that this must be considered as an instance of prolonged and established disease, "resulting from original error, and continued series of mal-practice." If it be denied that this was a case of hysteria, Mr. T. asks what it was? The case is by no means a solitary one. "Daily are young females, afflicted with this very pain under the left breast, bled, blistered, leeches, cupped, and passed through a long course of depleting and enervating medicines, when there is no earthly necessity for it." We fear this is but too true.

But our limits are far overstepped, and we believe we have shown samples enough of Mr. Tate's little work to induce the reader to peruse the original. It is really a very meritorious performance, and, the coincidence of ideas between Mr. Tate and Dr. Addison, whose books were published on the same day, clearly proves that these ideas are taken from actual observation of facts.

IV.

OBSERVATIONS ON THE DISORDERS OF FEMALES, CONNECTED WITH UTERINE IRRITATION. By *Thomas Addison, M. D.* Assistant Physician to Guy's Hospital, &c. &c. 8vo. 1830.

DR. ADDISON is already favourably known to the profession, and the present little work will not lessen him in public estimation. It is not the less interesting because it formed the subject of some clinical lectures delivered to the students of the hospital for the illustration of "a very prevalent and important class of diseases which had long engaged his attention"—nor is it the less original because another observer, Mr. Tate, came to nearly similar conclusions as himself, and published them at the very same time.

After a running commentary and pretty acute criticism on the doctrines of ancients and moderns, respecting general and local diseases, in which we see "one party contending for the constitutional origin of local diseases, and another party, with equal plausibility, contending for the local origin of disorders formerly believed to be general; whilst a very numerous class of important diseases constitute, at the present day, a sort of neutral ground, concerning which there appears to exist a truce amongst all parties," our author comes to the immediate subject of the work—UTERINE IRRITATION.

SYMPTOMATOLOGY.

"The most frequent symptoms of uterine irritation are, *irregular menstruation*, the discharge being preceded or accompanied by pain in the back, loins, or thighs, or in the region of the uterus itself, and attended with forcing or bearing down; the *discharge being in excess* either in point of mere quantity or in continuance, or in recurrence; *tenderness of the womb itself upon pressure* made either externally or *per vaginam*, a tenderness in some instances so great as to interfere with the privileges of matrimony; and, lastly, *leucorrhœa*. The most frequent symptoms, however, are, unquestionably, *painful menstruation* and *leucorrhœal discharge*, although the former is often the only symptom acknowledged by the patient herself. Such, Gentlemen, are the few plain, simple indications of a state of uterus which is repeatedly overlooked, although productive of the most serious disturbance both of the general health and of particular organs; disturbance which, when once produced, stamps a character upon the general and local ailments of the sufferer, strongly indicative, to the experienced man, of uterine irritation; a character which confirms him in the belief that it is from such irritation that the evil originates, and that is to correct the condition of the uterine system that his chief attention is to be directed." 12.

The most powerful *predisposing* cause of uterine irritation is constitutional irritability, commonly called the nervous temperament. The other predisposing causes are such as create morbid susceptibility, namely, sedentary and luxurious habits, late hours, mental perturbations, &c.

"The exciting causes again, are active exertion of any kind during the flow of the menses; frequent child-bearing, especially if the patient suckle her children herself; excessive venery, and, indeed, *venereal excitement of every kind*. Married women, I think, perhaps suffer most from child-bearing, and from imprudence during the menstrual period; unmarried women, on the other hand, from similar imprudence, and, peradventure, from causes of excitement of the genital organs, concerning which it is unnecessary to be very explicit." 14.

The first complaint usually made by females suffering from this irritation is, of feeling *nervous*, and perhaps low-spirited—we find a tremour in the hand when we feel the pulse—and such a mental agitation, if it be a young and susceptible female, that, when we attempt to soothe her, "she will begin to sob, her lips quiver, and she bursts into a flood of tears."

"She tells you, that, without any assignable cause, she gradually declined in health and spirits: that she has lost her wonted alacrity, has become indolent, and is easily fatigued by comparatively slight exertion; that she is readily flurried; that her heart often beats, flutters, or palpitates; that the impressions made upon her mind are altogether disproportionate to the causes producing them; that she is very prone to weep, and occasionally experiences sudden and transitory feelings of alarm and dread, especially during the night, without being able satisfactorily to account for them; in short, that both body and mind are in a morbidly sensitive condition, whilst general distress is strikingly depicted in her pale or dejected countenance. If you proceed in your inquiries to ascertain the state of the uterus, you are perhaps informed that she is regular; but if interrogated more narrowly, it will

almost uniformly be found that she suffers pain either before or during the flow, in the back or loins, and that in the intervals she is troubled with leucorrhœal discharge. To these inquiries she gives a reluctant reply; will often, perhaps from delicacy, conceal the truth, or, if she acknowledge it, will probably add, 'Oh, that is of no consequence; that is not my complaint; I have long been accustomed to that, and it does me no harm;' and then winds up the case with telling you that she has taken a load of tonic medicines without benefit. If you ask her whether such questions were ever put to her before, you are generally answered in the negative. Such a case as this, with slight modifications, is of common occurrence, yet it most frequently happens, that, with the general disorder, we have decided derangement of some internal organ or organs; and of these, the organs of digestion appear to be almost uniformly the first to participate; indeed the derangement of the digestive organs, to a greater or less extent, is so commonly associated with the general affection I have described, that one cannot but conclude that the general affection is most materially influenced, if not in part produced by it. It is sufficient, however, for our purpose to know that the exalted susceptibility of the general system and this deranged condition of the first passages, are very commonly co-existent, however they may stand in the relation of cause and effect.

"The first appreciable disturbance of the stomach is most frequently a tendency to *flatulency*, which flatulency is productive of different effects in different individuals, although, in all, the stomach itself appears to be in a morbidly irritable condition, so as greatly to modify or aggravate the consequences that would otherwise arise from the presence of such flatulency. The patient experiences uneasiness at the *scrobiculus cordis*; she complains of a sense of load or distension after meals, or, if the stomach be uncharged with food, of prickings and anomalous pains in the organ, all of which symptoms are pretty uniformly relieved for a time by the expulsion of flatus from the stomach. In other cases, the irritation produced by the flatus about the cardiac orifice, excites a sympathetic affection in the throat, a sort of *globus hystericus*, which is variously described by patients, some calling it *apasm*, whilst others compare it to a mechanical obstruction, and indeed one lady somewhat fancifully compared it to a bullock in her throat. It is a sensation, however, which will often last, in a greater or less degree, for days, or even weeks, with little intermission.

"At other times, the patient suffers from repeated vomiting, or is perhaps seized suddenly, but only occasionally, with vomiting, preceded, accompanied, or followed by an irregularly inverted action, chiefly of the *œsophagus*, and attended with an ascent of flatus, so as, in some instances, to threaten suffocation." 18.

Of the painful affections which attack particular organs or parts, the most serious, or at least the most prominent, are those which locate themselves among the abdominal viscera. The chief of these are,—

"1st. A pain seated under the left mamma, or under the margin of the ribs of the same side. 2dly. A pain under the margin of the ribs of the right side. 3dly. Pain in the course of the descending colon. 4thly. Pain in the course of the ascending colon, especially towards the right hypochondrium. 5thly. Pain affecting the abdomen generally. 6thly. Pain in the region of the stomach. And lastly, Pain in the region of the kidneys, sometimes extending down the course of the ureters to the bladder." 22.

With respect to the *real seat* of these painful affections, our highly gifted author is in considerable doubt. The natural functions of the organs or parts do not appear so necessarily disordered as to clearly indicate the localization of the pain. The pain under the mamma, or under the margin of the ribs of the left side, however, is, out of all proportion, more frequent than in any other place, and will often last for weeks, or even months, with little intermission.

"This pain is very circumscribed; it is not necessarily or constantly increased by a deep inspiration or by external pressure, although this is occasionally observed; it is seldom attended with cough; it is not materially affected either by a charged or by an empty state of the stomach, but varies in its intensity, and now and then goes off altogether for a few minutes, hours, or even days, or the pain shall subside and be succeeded by a mere uneasiness or sense of fulness in the part. This pain, as I have said, is of extremely frequent occurrence, and is very often associated with palpitation of the heart, or, what is much more usual, with unnatural pulsation of the organ, if I may be allowed the expression; i. e. the patient is conscious of the heart's action, or she feels as if its impulse were communicated to a part so sensitive as to excite distinct sensation, which, you know, is not the case in a state of health." 23.

The pain under the right ribs, though occasionally circumscribed, almost to a point, usual extends from the scrobiculus cordis along the margin of the ribs, nearly to the loin of that side. It is sometimes but not generally increased by a full inspiration. It is aggravated by external pressure, and sometimes there is very great tenderness indeed. Dr. A. has sometimes supposed this pain to be seated in the colon—sometimes in the duodenum—but is in doubt as to the actual seat of the uneasy sensation.

It is by no means rare to find pain affecting the abdomen generally, and that so closely resembling peritonitis as often to be treated as such. Our author confesses that he has often been puzzled, and sometimes deceived by this masked disorder, which might be termed a neuralgia of the abdomen. It is sometimes attended with a tympanitic, at others, with a flaccid state of the bowels—the former being the more distressing. The slightest touch can scarcely be borne, such is the morbid sensibility of the parts. By carefully watching the phenomena, some incongruity will be detected sufficient to aid the discrimination between neuralgia and peritonitis.

The pain in the *stomach* is usually strongly marked, "and the more intense the disorder, the more positive is the evidence of its being really seated in the organ mentioned." The pain sometimes comes on suddenly, occasioning the most excruciating agony, the patient screaming from the violence of her sufferings, and her countenance indicating extreme distress. Temporary cessations of pain occur, succeeded by other paroxysms more or less severe.

Lastly, the region of the kidneys is occasionally the seat of the pain, sometimes extending down the course of the ureters to the bladder. Or the bladder itself will be affected alone.—Dysuria is a general attendant on both forms.

The *diagnosis* is very important—sometimes difficult.

"Whenever a female complains to you of pain under the left breast, with or without palpitation or pulsation of the heart; of pain in the right hypochondrium; in the situation of the left or right colon; or of acute pain generally over the whole belly, or in the region of the kidneys or bladder—always be upon your guard, and if on inquiry you find a few, or many of the constitutional symptoms I have described, together with indications of uterine irritation, as shown by pain in the pelvis, in the loins, or in the thighs, before or during the catamenial flow; by too frequent or too profuse menstruation; or by leucorrhœal discharge; I say when you find such an assemblage of symptoms and circumstances, your suspicions will amount to a high degree of probability, that the complaint is not of an inflammatory nature." 31.

But as all these symptoms may proceed from *organic* diseases of the

uterus, that organ should be examined, if possible, especially if the age of the patient be that in which such diseases are apt to take place.

The indications are, 1st, to correct the morbid condition of the uterus; 2dly, to remove or mitigate the violence of troublesome symptoms in any individual case; and thirdly, to restore tone and vigour to the general constitution.

Dr. Addison has been induced to make the correction of the uterine disorder the first, or at least, the principal indication. He criticises the instructions which are usually given in respect to cupping the loins, leeching the pubes, the administration of purgatives, anodynes, baths, &c. and prefers applications made directly to the uterus itself and parts adjacent.

"The applications to which I allude, are *cold astringent washes*, injected *per vaginam* by means of a proper syringe. The ordinary womb syringe answers the purpose exceedingly well, but one of any convenient shape may be used, provided it be sufficiently large to contain from four to six or eight ounces of fluid. The injection should be introduced with such a degree of force, as shall secure its application to the upper part of the vagina, and to the os uteri; and the operation should be repeated two, three, or four times a day, according to the circumstances of the individual case.

"Either the mineral or vegetable astringents may be used, the former however I prefer, as they do not stain the patient's linen, and consequently are not so much objected to.— With respect to the precautions to be observed in the employment of these injections, very few are required beyond what common sense would dictate. Should the injection occasion smarting, which is by no means unfrequently the case at first, it may be diluted with water, or water alone may be used till the original tenderness subsides, which for the most part it will soon do. It will also be prudent to instruct the patient to relinquish it a little before the expected period of menstruation, and to resume it as soon as that period is over.— These are almost the only precautions I have ever deemed it necessary to observe. Although in very irritable habits, and especially when the stomach is liable to be affected with pain and spasm, it may be as well to direct the wash to be used tepid at first, gradually diminishing the warmth till it is brought to the ordinary temperature of the patient's apartment, which will pretty uniformly be borne exceedingly well after a time, except perhaps during a few of the coldest months in winter. The wash I most frequently employ is the *Liquor Aluminis Compositus*, of the London Pharmacopœia, that is, two drams of *alum*, and two drams of *sulphate of zinc*, to a pint of water. This practice must be persevered in for a length of time, proportionate to the obstinacy of the case and the effects it produces. Indeed, I myself recommend females never to relinquish it, but to employ it from time to time, as long as they continue to menstruate, to prevent the recurrence of the disorder, and its unhappy consequences. I have said that the patient should desist from the use of the injection, a little before and during the menstrual period, but she ought also to be especially cautioned against using any violent exertion, or undergoing any unusual fatigue at that time, as nothing so completely thwarts your purpose as imprudence committed whilst the irritable uterus is performing its functions." 38.

When the uterine irritation is characterized by frequent and excessive flow of the menses, Dr. A. has directed the patient to remain quiet or in bed, and to desist from the wash during each recurrence.

Upon the means of removing occasional symptoms Dr. A. has given much judicious advice, and then proceeds to the third indication, the restoration of health and vigour to the general constitution. The early use of tonics has been extensively tried, with very unsatisfactory results in a majority of

cases. The cause, Dr. A. believes to be, inattention to the local irritation. The sulphate of zinc may, however, be given early, provided it do not offend the stomach. Dr. A. begins with a grain night and morning, either alone, or with a few grains of extract of conium or hyosciamus, the pil. galb. comp. or extract of gentian or bark. The diet is of the greatest importance, and should be carefully regulated. A number of cases, chiefly copied from the hospital-books are given in illustration, and with which the volume concludes. These cases and the whole work we recommend to the serious attention of our readers, who will profit by its perusal.

V.

ON THE ANATOMICAL CHARACTERS OF SOME ADVENTITIOUS STRICTURES. By Dr. Hodgkin.

[Medico-Chirurgical Transactions, Vol. XV. Part II.]

OUR readers are aware of our sentiments respecting the value of morbid anatomy, and we need not repeat them at any length now. None can appreciate more highly than we do the real advantages which have been and will be derived from this source, one of the most pregnant with *certain* information of any within the range of the various departments of medical learning. But, as generally happens, there are some of an enthusiastic temper and a theoretical turn, who look upon morbid anatomy as the elixir vitæ, the arcanum of our science, which is to solve all mysteries, dispel all doubts, raise the modern physician with his scalpel and dissecting-case immeasurably beyond the disciple of Hippocrates in former centuries, and in short can transform the most uncertain of all species of the human knowledge into the sober and positive reality of a mathematical proposition. We appeal to the several journals of the day for evidence of the accuracy of the character we have given of this wild and visionary party, a character which might readily have been looked on as caricature. It is not so, however; and on more than one occasion we have raised our voices against individual disciples of this modern and credulous sect. We would then encourage the prosecution of morbid anatomy by every means in our power, but let those who do so bear in mind this caution, that the appearances visible to the eye and palpable to the touch are not *always* the disease he has been treating ineffectually during life, but its sequelæ; they are not the emblems of what it is his business, and should be his aim, to cure, but the gloomy trophy of a victorious malady, the signs that he has failed in arresting the morbid actions by which their organic lesions were produced.

Bearing these facts in mind, the cultivator of morbid anatomy will improve himself and his profession, and the *facts* which he accumulates, if carefully observed and faithfully recorded, will give to his writings a perpetuity of fame and value, which the views of systematists and speculations of theorists cannot possibly maintain. The works of Morgagni will be referred to so long as medicine and science shall endure. Dr. Hodgkin, whom we are happy to call our friend, deservedly holds a distinguished place as a

morbid anatomist, for great opportunities, seconded by equal or greater diligence, have given his opinions in this department the weight and measure of authority. The "Memoir on some Adventitious Structures," in the last volume of the Medico-chirurgical Transactions, is one that we would earnestly recommend to the attention of our readers. Our limited space and the practical nature of this Journal must, we fear, prevent our entering on the analysis of the paper, and to attempt a review of it would be much such a farce, as professing to review a work on trigonometry in half a dozen columns. We confess that we are deficient in the cool assurance and consummate gravity, which enable critics to knock off a review in a page of large print, and compress the pith of a dense octavo in a short remark and a long quotation. In the present case, then, we can neither promise a review nor an analysis, but shall merely offer one or two samples of the Doctor's fare, to serve, like the quails to the Scotchman, for a whet to his reader's appetite. Unlike the Scotchman, however, we cannot doubt that the said reader will find his appetite not a whit the worse for the *dejeuné*.

Dr. Hodgkin divides the *adventitious* serous membranes or serous cysts into two classes. The first comprises those which are simple, for the most part solitary, and not possessed of the remarkable property of giving origin to similar new growths. Such are the cysts in the plexus choroides, female mamma, and occasionally in the ovaries, &c. The second class consists of those which are capable of producing other cysts of a similar character with themselves, or morbid growths, which, if they do not present, strictly speaking, the character of cysts, are nevertheless referrible to the same type or mode of formation. Such are most frequent in the ovaria. At the time when a post-mortem examination is usually obtained the cure has been long in progress, and the cyst has to a great degree lost the character of a serous membrane. It now presents the following appearances :

"Its parietes appear to be rather fleshy, or coriaceous, than membranous; and the internal surface becomes more or less generally roughened, as if by ulceration or abrasion. The most important feature which it presents, is the appearance of tumours and elevations dispersed more or less thickly over the internal surface, and which, notwithstanding the very great variety which at the first view they seem to present, are nevertheless referrible to one general mode of formation.

"I shall commence with the description of that form which is intermediate between the two extremes; not merely because I shall more readily proceed from this as a standard to the explanation of its modifications, but also because the peculiar structure is, in this form, the most distinct and intelligible.

"In this form we observe on the interior surface of the principal cyst elevations more or less rounded, and of various sizes, projecting into the interior of the cavity, and covered by a membrane, which is continuous with the lining of the principal sac.

"On making an incision into these tumours, we find that they also consist of cysts of a secondary order, filled by a secretion, often serous, but almost as frequently mucous. It is not, however, merely by this secretion that these cysts are filled. On looking more minutely into them, we shall generally find, that from one or more points on the interior of these cysts there grows a cluster of other or tertiary cysts, upon which is reflected the lining membrane of the cyst in which they are contained. Cysts of the secondary order not unfrequently afford as complete specimens of a reflected serous membrane as either the pericardium or the tunica vaginalis, the lining membrane of the containing cyst corresponding to the reflected portion, as that covering the contained bunch of cysts does to the close portion.

"The proportion which the contained cysts bear to the cavity of the membrane reflected over them, is extremely various. Sometimes the fluid, especially when it is of a serous character, nearly fills the containing cyst, whilst the bunch of cysts is of very inconsiderable size. At other times, the superior cyst is almost entirely filled by those of the inferior order; in which case we may generally find, that the nodulous or tuberoso elevations, which we may have observed on the exterior of the containing cyst, are occasioned by the unequal development of the contained cysts; for those which have grown most rapidly and have attained the largest size, forcibly dilating that part of the cyst which is reflected over them, produce a kind of hernia at that part. It sometimes happens, that the distension occasioned by the growth of the contained cysts is sufficient not only to disturb the even surface of the containing cyst, but actually to produce a rupture, which admits both of the escape of its fluid contents, and of the unrepressed growth of the secondary or tertiary cysts, which took their origin from its internal surface. The inferior cysts themselves are found to contain a serous or mucous secretion, and very often to produce another order of cysts, possessing the same character with themselves. It is certainly by no means surprising that these cysts of different orders, which sometimes present the appearance of delicate and pellucid sacs filled with clear and colourless serum, and possessed of the astonishing power of giving rise to an almost innumerable multitude of cysts presenting the same character with themselves, should at the first view have been confounded with true hydatids; but it is no less surprising, that a little careful inspection did not at once irrevocably remove the delusion.

"First.—Because the bunches or clusters of secondary cysts are invariably and permanently attached to and continuous with the internal surface of the superior cysts, in which they are contained; and,

"Secondly.—Because delicate vessels are seen ramifying from the one upon the other." 279.

In another variety the cysts are characterised by slender peduncles, and in a third by broad and extended bases.

"The pedunculated cysts are either produced singly, but in the closest approximation from a particular part of the containing cyst, or they may be attached to it by a common peduncle, from which the proper peduncle of each proceeds. These elongated productions sometimes become highly vascular, and, in the defect of an internal secretion, contribute largely to that which occupies the sac into which they project. Sometimes, on the contrary, they are very feebly organized, and appear ultimately to lose their vitality, in consequence of the kind of strangulation which they receive at the narrow neck by which they are attached to the containing cyst.

"It would appear that the pedunculated cysts and filaments which have thus lost their vitality, are a pretty frequent source of irritation to the serous membrane reflected over them, which constitutes the containing cyst; the product of the inflammation thus excited is of the inorganizable kind, and often forms a thick and grumous substance, which sometimes may be washed out from the bunches of filaments, but at other times these come away with it, in the form of shreds.

"The bunches of slender pedunculated cysts, and the tufts of filaments almost resembling tassals, sometimes proceed at once from the inner surface of the principal cyst, but they are more frequently met with growing from the interior of the secondary cysts." 283.

The secondary cysts having a broad attachment and flattened form are collected in clusters on the parietes of the superior cyst, constitute shut cavities, acquire at times a considerable size, contain in some instances a serous and in others a mucous secretion, and produce in their parietes inferior orders of cysts, having like themselves broad bases and flattened forms.

"From the extent of their bases, the secondary cysts in this variety occupy proportionably a much larger space on the internal surface of the containing cyst, and by their development, although they increase its size, they seem more completely to encroach on its particular cavity. In cutting into a tumour composed of this form of cysts, we may find, it is true, several cavities of considerable size, but we shall probably not find the greater part of the fluid collected into one particular cavity. Hence, in this variety of ovarian dropsy, fluctuation is often obscure, and the relief afforded by paracentesis only partial and trifling. I am not aware that the secondary cysts, in this variety, ever lose their vitality from defect of nutrition, but if such an effect be ever produced, it cannot be the result of so limited and partial a cause as that which we have seen to operate in the preceding variety. There is another point of difference no less worthy of remark as distinguishing this variety from the two preceding, that is to say, from the standard and the pedunculated variety, which consists in the arrangement of the subordinate parts. In the two last-mentioned forms, in consequence of the limited extent of the spots, whence the secondary productions take their rise, they necessarily acquire somewhat of a radiated arrangement, whereas, in the variety with which we are at present occupied, it is difficult, if not impossible, to reduce its internal structure to any definite arrangement." 285.

Although we may observe these three well-marked forms in ovarian serous cysts of the second class, and though for the most part each individual case more particularly affects one or other of these forms it occasionally happens that two or all may be found in the same superior cyst, whilst even then one form seems to predominate. With some remarks on the etiology of these ovarian tumours we must conclude.

"There seems to be an hereditary disposition in some females to the production of the serous ovarian cysts. Even in these cases they are mostly unaccompanied with any constitutional taint, that is to say, other parts of the body are not simultaneously affected with similar productions. It is even more common for one ovary to be singly affected, than for both to give origin to this form of cysts; nevertheless it does sometimes happen that we meet with cases of double ovarian dropsy, but in many, if not in most of these, there is likewise a complication with some one of the diseases commonly called Malignant, of which I am about to speak. It is by no means easy to say what are the exciting causes of this form of ovarian dropsy. Though in many instances the patients refer the commencement of the disease to parturition; yet it is far from being uncommon for unmarried or barren women to labour under this affection. The tumours and growths allied to ovarian dropsy, of which I shall presently speak, as formed in other parts of the body, can often be referred to some mechanical injury, but in the case of organs, which appear to be so well protected as the ovaries, it is more difficult to conceive the possibility of such an exciting cause.

"Something may possibly be ascribed to the natural and periodical changes which these organs in common with other parts of the female genital system doubtless undergo." 286.

The following remarks on the mode of examining malignant tumours by means of sections are deserving attention.

"The tumours of the description of which I am now speaking have a more or less rounded form. On making the section of them they present various appearances, but are all more or less divided by septa, which affect sometimes a radiated form, and at others a cellular character. Both of these characters have been insisted on by many writers on this subject; but I believe the differences which have been observed in many instances depended on the direction in which the sections were made.

"The mode of examination by means of sections, if it be the only one employed, is not better adapted for the investigation of these tumours than for that of the brain. The ob-

jection to it is increased by the plan of immersing the specimen in alcohol, which is sometimes had recourse to for the purpose of hardening the parts. By this measure the fluids are coagulated, and the transparent parts rendered opaque: we consequently destroy two of the most important characters which assist the examination, by marking the boundaries of structure and arrangement. It is on this account that almost all the preparations which I have made myself, or seen made by others, are more or less unsatisfactory, and, even in the most successful cases, fall incomparably short of the inspection of the recent specimen. If we carefully dissect down to the surface of one of these tumours, we shall usually find that it has a capsule or covering, which has, I believe, generally been supposed to consist of the altered and condensed cellular membrane of the parts which have given way before the growth of the tumour. This idea is probably correct with respect to the unequally thick external part of the capsule; but if we dissect carefully, and examine those tumours in which the process of decay has either not commenced, or has made very little progress, we shall find that surface which is next to the mass of the tumour more or less smooth and even, and on raising it we find that it is reflected over one or more somewhat pyriform bodies, attached by a base, which is generally narrow and peduncular to some part of the circumference of the inclosing capsule. Unless the tumour is very small, it is much more common to find several rather than a single body of this kind, and as there is often little, if any, fluid intervening between them and the enclosing capsule, their form is somewhat modified by their mutual pressure. Sometimes, though more or less closely applied to each other, these pedunculated bodies are perfectly detached at their sides, and may, consequently, be readily traced to the point which forms the common origin of their peduncles. At other times, these bodies are so adherent among themselves, and the membrane covering them is so tender and delicate, that without very great care the arrangement of their structure may be overlooked, in consequence of the pedunculated bodies being broken or torn through in a different direction from that to which their mode of formation would naturally dispose them.

"It must be sufficiently obvious that the appearance presented by the section of a tumour, such as I have just described, must be very materially affected by the direction in which the section is made. If it pass through or near to the point at which the pyriform bodies are attached to the enclosing cyst, it must nearly correspond with the direction which some of these bodies take towards the circumference, and their edges will consequently be seen in the form of radiating lines. On the other hand, if the section be made more or less nearly transversely to the axes of these bodies, their sections will convey the idea of cells of various shapes. If we continue dissecting and raising the outer cyst, forming the reflected membrane which covers the radiating pedunculated bodies, we shall generally find, that on one or more sides it dips down deeply into the mass of the tumour, and forms a part of the septum which separates the one packet of pedunculated bodies from the others which generally concur to form the mass of the tumour, for it comparatively rarely happens that the tumour is composed of a single cyst filled with pedunculated bodies. On examining the different encysted packets of pedunculated bodies which compose the tumour, we shall often find some indication of their having taken their origin from nearly the same spot, which is generally the most indurated part of the tumour. We may likewise observe, that the different secondary tumours or encysted bundles of pedunculated bodies are in very different stages of progress." 297.

We said that this could only be a notice of Dr. Hodgkin's Memoir and we have kept our word. We wish the worthy Doctor health to pursue his perilous avocations, and opportunities of laying the profession under obligations by communicating the results of his labours to his brethren.

VI.

SKETCHES OF THE MEDICAL TOPOGRAPHY OF THE MEDITERRANEAN: COMPRISING AN ACCOUNT OF GIBRALTAR, THE IONIAN ISLES, AND MALTA, &c. By *John Hennen, M. D. &c. &c.* Edited by his Son, *J. Hennen, M. D.* Octavo, pp. 666. Underwoods, 1830.

By a paper published nine years ago in our esteemed contemporary, the *Edinburgh Medical and Surgical Journal*, it will be seen that the late Dr. Hennen directed his attention in an especial manner, to MEDICAL TOPOGRAPHY. His subsequent residence, as inspector of hospitals, in Gibraltar, Malta, and the Ionian Islands, gave him ample field for indulging his favourite studies, and prosecuting his useful researches. The ample volume before us contains the result of his indefatigable labours, and, in conjunction with his "*Principles of Military Surgery*," will transmit his name to posterity, in the medical annals of his country.

GIBRALTAR.

Passing over the introductory memoir, re-published from the *Edinburgh Journal*, we shall select for the present article the medical topography of Gibraltar, one of the strongest and most important fortifications in the possession of Britain—the key of the Mediterranean—and a severe thorn in the side of Spain.

This celebrated Pillar of Hercules juts out into the sea, in an oblong form, with a craggy ridge for its summit, more than fourteen hundred feet high—the rock being about three miles in length by half or three quarters of a mile in breadth. Its western side consists of a series of rugged slopes interspersed with abrupt precipices—its northern extremity, facing the neutral ground is perfectly perpendicular, with the exception of a narrow ribbon along the shore. The eastern side is a range of precipices—while its southern point falls down into two small flats, called Windmill Hill and Europa Point. It is connected with Spain by a low sandy flat, called the Neutral Ground.

Passing over a number of minute topographical details, we shall now advert to some of the numerous sources of insalubrity which this singular fortress presents.

"The immediate neighbourhood of the spots now enumerated, demands the particular attention of the Medical Topographer. At each of them, public sewers discharge themselves, and public necessities are erected; from these causes, as well as from the occasional admixture of marine exuvie, the effluvia which arise are frequently very offensive, especially when the westerly winds blow, which drive them inwards upon the town, from which they are prevented from escaping with sufficient rapidity, by the intervention of the rock behind. In summer, when the afternoon sun lies for so many hours on the western face of the mountain, this nuisance is occasionally felt with peculiar severity.

"Besides these general nuisances, each of these spots has its own peculiarities. The offensive matters thrown up on the beach from the numerous small craft which are crowded

around the vicinity of the 'Old Mole,' must tend to deteriorate the purity of the air in no small degree; much of these exuviae are carried away daily, but much remain afloat, and when old hulks, timber, boats, and other incumbrances are allowed to lie on the beach, a considerable quantity of filth accumulates among them beyond the reach of the scavengers. When it is recollected, that the floating population of the Bay of Gibraltar may be estimated at 2000 souls the year round, the amount of animal and vegetable offal must obviously be considerable.

"To the north and south of the King's Bastion, several public sewers empty themselves, but not having been carried into the sea, or even to low water mark, a great proportion of their contents is left on the beach. It is only since the administration of Sir George Don that they have been carried as far as they are at present, but it is proposed to extend them so as to obviate the nuisance completely. Wooden sheds are also projected from the Line Wall in this neighbourhood, and serve as necessaries; the soil is never effectually removed from them, as the operation of the tide is not sufficiently powerful, even when it is at the highest. These sheds will soon, I trust, be removed, or so altered, that the soil may be at once conveyed into appropriate drains, or drop directly into the sea. From the Old Mole to the King's Bastion, nearly one half of the Line Wall is covered by the breakwater already noticed. This breakwater was thrown up about the year 1788; within it, very extensive new works are now constructing. Until of late years the water had not free course, and the factor was excessive; even now it is at times very unpleasant, and is increased by some extensive sewers emptying themselves in the neighbourhood." 11.

The Camber near the Mole receives the contents of several sewers, and was notorious for bad smells a few years ago; but is less so now.

"In Rosia Bay, the sea is frequently, during the summer season, as stagnant as in a mill-pond. On the north end it is protected from the wind by high rocks; on the south it is defended by the Mole, and it is only open to the westerly winds, which are most prevalent in winter. From the Line Wall, which runs along the rocks, two wooden necessaries, similar to those near the King's Bastion, project, and the soil is in like manner retained on the sandy beach. Two large sewers also empty themselves here. Exhalations of a very offensive nature arise from these sources, and with other circumstances, hereafter to be noticed, may tend to account for the unhealthy character which Rosia Bay has laboured under. In every spot where sewers mix their contents with the sea-water, numerous air-bubbles are perceptible on the surface, doubtless from the extrication of gas from the putrid matters thus accumulated. At the Old Mole this can be very readily observed. Mr. Hugh Fraser and Mr. P. Wilson, gentlemen of the Civil Hospital, from whose local knowledge I have derived much information, assure me that there is not a summer in which watermen, who sleep in their boats anchored at that part of the Mole where several sewers intermix their contents, are not seized with bilious remittents." 12.

About three miles from the garrison a small stream opens into the bay, and the banks are malarious, the inhabitants being subject to agues. At the distance of five miles there is a still more fertile source of fevers, at the mouth of the Guadarranque, where the ground is swampy and unhealthy. But again;—along the edge of the beach there is erected a causeway leading out to the Neutral Ground; and bounded by this causeway on the West, and by a part of the rock and Spain on the East and South, "there is an artificial inundation, which serves as a strong protection to the works."

"This inundation was formerly a morass, and the only one that has probably ever existed near the garrison. In plans of the fortress and of the siege of 1704, this morass is represented as communicating with the sea by a long narrow channel running parallel with the

beach for some distance. In 1732 it was dug two feet below the level of low-water mark in the bay, and many deep pits in the quincunx form were sunk in it. At present it contains eight transverse and one longitudinal ditch, from ten to twelve feet deep; it covers nine acres of ground, and the depth of water generally, is from four to six feet. The contents can be partially let off by means of sluices, at the foot of the glacis; around the edges, however, the water is often dried up, leaving behind a green mossy substance, probably the remains of 'Lemnæ, Algæ,' and other aquatic plants, which, from their approach to an animal nature, and their abundance of nitrogen, are capable of affording highly putrescent miasmata. It also must partially stagnate in the pits and ditches above described; and its vicinity to the beach, behind the Mole, most probably serves to render the exhalations from this neighbourhood of a still more insalubrious tendency than they otherwise would be. To heighten all, there formerly existed a line of necessaries in the 'Orillon Ditch,' or Lazaretto, which, previous to 1814, discharged their soil into the inundation, and emitted a most offensive odour; they are now removed." 14.

Underground springs pour forth their contents, and dilute the sea-water of this inundation; while the rains that fall from the heavens percolate through the mountain and form supplies for wells and aqueducts. The whole surface of the mountain abounds in caves, fissures, and pot-like holes, which retain the rains, dews, and passing vapours. The most celebrated of these is St. Michael's Cave, more than eleven hundred feet above the sea, and whose bottom has never yet been ascertained.

"Wherever artificial excavations have been made in the rock, water, in almost every instance, filters through in great abundance from various springs and mountain rills, and in the Lines a very fine well is sunk, which was first discovered while the excavations were cutting." 16.

The public tanks, which are seven in number, are capable of holding 1,552,700 gallons of water! There are 105 private tanks.

"Although the rain pours in torrents down the entire western face of the mountain, there are several points at which these torrents have worn out deep channels or gullies for themselves. Five of them are particularly worthy of notice. Of this number four discharge their contents through the town, and one upon a large bank of sand to the southward of the New Alameda, close to the reservoir of the aqueduct. It should be kept in mind, that the points at which the rains pour off with the *greatest* precipitation, are precisely the points where there are no habitations; and that where the violence of the torrent ceases, there the residences of man commence, and there, consequently, aqueous exhalation is most felt by him." 19.

The bottoms and sides of all these gullies are rocky. In their general appearance, they resemble, on a small scale, the unhealthy "*frumares*" of Sicily and the Ionian Isles, but without the vegetation which so richly clothes their banks. They run their course in the direction of the blue barracks, city, Mill-lane, Boyd's-buildings, and other spots notoriously unhealthy during the epidemic years 1804-10-13 and 14. We cannot follow our observant author through his delineation of various localities on this celebrated rock, which are unquestionably capable of affording all the materials, in proper seasons, of febrific miasmata. But we must dedicate a page or two to the Neutral Ground, which, says Dr. H. is of *more* importance to the health of the garrison than is generally supposed.

This isthmus, which is a kind of quick-sand, has been occasionally washed over, to the extent of two-thirds of its surface, when strong easterly winds and spring tides prevailed in the winter time. Hence extensive pools have been left behind, close up to the gardens. The present governor has erected a dike to obviate these occurrences.

"In winter the rain-water forms numerous and extensive pools, which continue during the spring months. These pools are only dried up completely by the summer heats; but there is one near the high-road beyond the gardens which is never completely dry. Besides these adventitious depositions of moisture, there are numerous internal sources of permanent supply at the Neutral Ground. I have been led particularly to examine this spot, in consequence of the assertion that no source whatever of Marsh miasmata existed at Gibraltar. If, by this assertion, it is meant that *no morasses* at present exist, I perfectly concur with it, but I can go no further, because, under the present head, I have indicated numerous sources of aqueous exhalations, and I am about to point out others of a still more extensive nature. Indeed, the most superficial observer could scarcely ride over the Neutral Ground without perceiving many external evidences of underground moisture. The '*Arundo Phragmites*,' the infallible test, grows even now, in great luxuriance, on several of the banks which surround the gardens; it is only necessary to thrust the reeds into the sand and they soon take root. It appears that this plant was formerly much more common and more extensive, for in the different histories of the seige, we frequently meet with accounts of the reeds being set on fire, &c.; but the fact does not rest on this species of evidence, or on external appearances, the auger and the shovel prove it completely." 22.

At almost every spot that has hitherto been perforated, water has been found within six feet of the surface, often much nearer. The quantity of water drawn from the Neutral Ground is immense. The gardens alone consume one thousand gallons daily, independent of what is used for domestic purposes and the shipping.

From thermometrical observations made during ten years, viz. from 1816 to 1826, the medium range of Fahrenheit in the months of June, July, August, and September, was 84 degrees—the medium range of the East and West Indies. In the months of January, February, and December, it was 51 degrees. The Easterly winds, called *Levanters*, are peculiarly disagreeable and unwholesome.

"While the easterly winds blow, the sewers throughout the town emit the most offensive vapours, and even before they come on, the practiced olfactory organs of the inhabitants detect their approach. Is this the result of the humid atmosphere softening the soil of the sewers, and occasioning an increased exhalation?" 32.

We regret that our limits will not permit us to do full justice to the minute and highly interesting medico-topographical details contained in this section of Dr. Hennen's work. Suffice it to say that the sources of unhealthy exhalations are exceedingly numerous on this rock—a circumstance which several months residence at Gibraltar many years ago, strongly impressed on our minds. Intermittent and remittent fevers, dysenteric affections, and infantile marasmus are the worst diseases among the inhabitants. And after all the attention which has been paid to the increase of salubrity in Gibraltar, there are still abundant sources of sickness left—some of which are beyond the reach of human remedy.

"Stables and sheds for the labouring cattle, and for some of the poorer inhabitants are scattered along the side of the hill; from these and from several of the better habitations, offal is deposited in or upon the banks of the gully. This offal consists of the most offensive materials, the situation not being very accessible, and but little frequented by the inspectors of nuisances. These matters often lie where they are deposited, until the lighter parts are dispersed by the winds, and the more solid are hardened into an uniform mass. When the rains fall, the more soluble parts of this compost are carried down in a state of minute division, while the grosser are forced along 'en masse,' and are thrown into corners and hollows along the course of the stream, or hurried into the sewers, where they mingle with, and often obstruct the course of the waters." 49.

It is an erroneous supposition that the surface of Gibraltar is so precipitous that all the water which falls from the skies is immediately carried off. "That part of the town which runs from the main street to the Line-Walk, is naturally as level as most towns in England." Many parts are what may be called "made ground," which absorb the rain, and retain a considerable portion of it, "the effects of which, when it is saturated with putrid materials, such as are enumerated above, cannot but be influential on the salubrity of the neighbourhood." The filth, and perhaps the insalubrity of Gibraltar is increased by the system of washing clothes in the houses of the inhabitants, the foul waters thus produced being thrown into sewers or the adjoining gutters, there to annoy the olfactories and augment the putrefactive process.

The neighbourhood of the dock-yards, the naval gardens, and Rosia Bay, have always been considered as situations capable of emitting febrific miasmata, such as the exhalations which arise from extensive gardens highly cultivated—from a beach that lies low, receiving common sewers—and from a neighbourhood on which such a quantity of rain falls as to supply an extensive set of tanks, capable of holding more than a million gallons of water. The following passage deserves attention.

"It has been stated, that the vapours of sewers and cesspools were evidently not so pernicious as was apprehended, because the fever did not follow the line of sewer, *topographically*, and because several sewers were afterwards opened without generating fever in the immediate neighbourhood. But it is not the neighbourhood of a *good* sewer, or of one *fully opened* up, that is injurious to health; the injury is done by an *inefficient* sewer, the vapours of which are not diluted and neutralized by the free access of atmospheric air. A bad sewer, in a confined place, is worse than no sewer at all, because it serves to collect, accumulate, and retain filth; while a line of open drain, in a situation fully exposed to the air, will be comparatively innocuous as a source of febrific miasmata. Free ventilation makes all the difference; a partial rent in a sewer is always found to be more injurious than an opening of several yards, made for the purpose of repair. It should also be remembered, that a close sewer emits no vapours along its *topographical course*: they proceed from its mouth only, or from accidental rents." 52.

Population has made rapid advances during the last 30 or 40 years in Gibraltar. In 1791 it was 2885—in 1826 it amounted to 15,480!! When the military population is added, the whole exceeds 20,000 souls. The poorer classes are crowded together in apartments of a very bad description—the majority of them being "strikingly deficient in size, ventilation, and the means of cleanliness," while some of them "are utterly unfit for human habitations."

"In the premises of a Jew, in 'Victualling-office-lane,' I found, on a ground floor, seven occupied apartments—one store-room, and one necessary, built around an area of twenty-five feet by seventeen feet five inches; this area was encumbered with casks, baskets, and jars piled along the walls, and the upper part was curtailed by a projecting gallery, so that the space left for ventilation was reduced to eight feet five inches by five feet six." 70.

When it is considered that the summer heat of Gibraltar is 80 degrees of Fahrenheit, nearly that of the Tropics, some idea may be formed of the insalubrity of such dwellings as those described by Dr. Hennen. The foregoing abode contained 24 individuals, and of the occupied apartments, only two had windows to the street—two had small slits in the upper part of the wall—the others had neither air nor light, except what they derived from the area. Upon the whole, though Gibraltar is improved beyond all expectation or conception by the present Governor, it is still a place "confined and ill-ventilated, in which innumerable obstacles to cleanliness exist, and with a population filthy in themselves, and over-crowded perhaps beyond any other community in the world."

Dr. Hennen not having been present in any of the severe epidemics of 1804—10—13, and 14, declines giving an opinion on the important and much litigated points of endemic or imported fevers.

"The professional characters of the supporters of the opposite theories stand high, and I neither question the fidelity of their reports, (to the best of their knowledge,) nor the uprightness of their intentions; but it has been long allowed by the more dispassionate part of the profession, that much is assumed on defective evidence; that much special pleading has been entered into, and that there is often room to suppose, that the opposite parties have contended more for victory than truth." 92.

The indefatigable author then gives an impartial and strictly neutral sketch of the different epidemics, from 1804 onwards. By this it appears that the immunity from second attacks was ascertained 26 years ago.

"Relapses were frequent about the end of October and beginning of November, principally among intemperate subjects; but either no instance of second attack occurred, or if it did, it formed an exception to a rule, admitted on all hands to be general. The same was observed of persons who had had the yellow fever in the West Indies, and advantage was taken of the circumstance in conducting the duties, both in the hospitals and in the barracks. A quarantine encampment, of those who had not passed through the fever, was formed on the 9th of November. These men, with the exception of the 13th regiment, took their bedding with them; the 13th, by the precaution of their Colonel left their old dirty bedding behind, and brought two clean blankets in lieu: not a man of this corps was attacked with disease, whilst, on the 12th of this month, five men of other corps were seized, and within the three following days every regiment, except the 13th, had men taken ill. The bedding was then taken from them all, and fresh and clean articles supplied. I cannot discover whether any others were attacked after this change. In whatever light it may be taken by either the contagionists or non-contagionists, this fact suggests a useful precaution, which indeed it is astonishing could have been overlooked by the most careless observer." 110.

Our author concludes by expressing his creed in the words of Dr. Hancock—from which it will appear that Dr. H. is a contingent contagionist.

"The conclusions," says Dr. Hancock, "to which I have referred, are these; that our continued fever, (whether called typhus, or synochus, appears to me quite immaterial,) often

arises from small beginnings; that it has a power, under certain circumstances, of generating a contagious '*seminum de novo*,' which is sometimes more, sometimes less easily disseminated; that the symptoms of the disease are liable to be aggravated to a considerable height by local causes, chiefly in the autumnal season, and still more remarkably, if it has prevailed as an epidemic in pestilential seasons; and that it declines in winter to give place to its milder form, or to some other disease in the ensuing summer.

"To these conclusions, I would add one more quotation from the same indefatigable author—'He that, exclusively believing in a contagious virus, asserts medicine and police regulations can do all, and attributes the removal of pestilence *solely* to their means, may be as much in error as he who, convinced of a general contamination in the air, denies contagion, and believes a crowded or scattered population would make no difference in the mortality, or that a filthy habitation would add nothing to the malignity of the distemper; and that, as the disease is from the air, it matters not whether he stands idly gazing on it, till it shall cease, or assists to remove a local nuisance out of the way.' " 117.

We regret to learn that Dr. Hancock himself fell a victim to the Gibraltar epidemic of 1828, while ardently engaged in attending the sick of the garrison, and investigating the nature of the fever.

We have no room left for noticing the common diseases of Gibraltar. But Dr. Hennen states that remittent fevers "are of frequent occurrence"—"and that genuine yellow fevers (such as are seen in the West Indies) accompanied with the true black-vomit, occur both in the Civil Hospital and in private habitations *every season*." Pulmonary affections are so frequent in Gibraltar that they have been styled the "TRUE ENDEMIC of the rock."

In our next article we shall introduce some interesting particulars respecting the medical topography of the Ionian Isles.

VII.

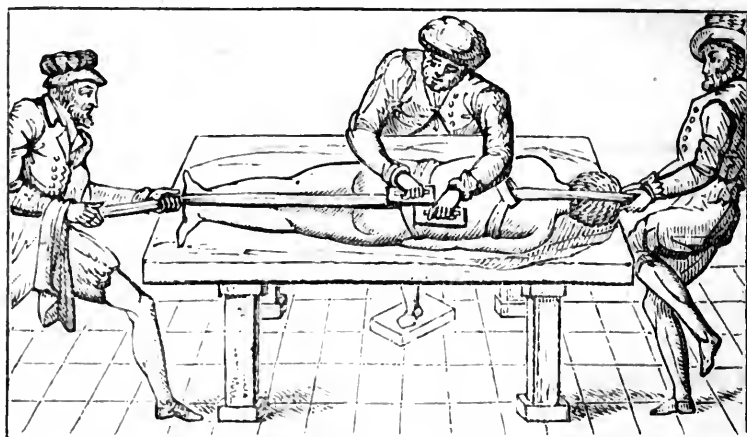
ON THE MECHANICAL APPARATUS FOR DEFORMITIES. By L. J. Beale, Surgeon.*

ALTHOUGH we have various monographs on particular varieties of spinal distortion, and many scattered papers on deformities of the limbs, yet there is no good and systematic description of these maladies in the English language. The task which Mr. Beale has undertaken is the collection and condensation of those observations which have been recorded by various authors, on the subject in question. In the performance of this task, the author appears to have used much diligence and exercised much judgment. The result is, unquestionably, a very useful elementary compilation, containing the pith or marrow of numerous heavy tomes, interspersed with judicious observations and practical hints. Such a work cannot, of course, bear a regular analysis; but we have selected the twelfth chapter, on mechanical apparatus, for the subject of this short paper, in which will be found

* A Treatise on Deformities, exhibiting a concise View of the Nature and Treatment of the principal Distortions and Contractions of the Limbs, Joints, and Spine, &c. with plates and woodcuts. Octavo, 1830.

some curious particulars respecting the artificial means that have been resorted to by surgeons in former, as well as in present, times, for the cure or alleviation of this class of afflictions.

To describe a tenth part of the machinery invented for human distortions would require a large volume. Before the knowledge of anatomy was much diffused, the spine was considered by many as a single bone, and its curvatures were treated in the same way that a bent stick would be treated, when the object was to make it straight. Force was applied to the two extremities, to draw them into their proper position, and the pressure was made on the prominent part. In our own days, a learned doctor, of manipulating celebrity, insisted that projections of the spine depended on dislocation of the vertebræ, and then the thumbing, stretching, and humbugging process came into vogue. The following woodcut, taken from Ambrose Parée, will shew that there is "nothing new under the sun." The centre figure is a rather flattering likeness of a modern spinewright, in the act of thumbing the dislocated vertebræ back into their places.



"It is fit to lay and stretch forth the patient upon a table, with his face downwards, and straitly to bind him about with towels under his arm-pits, and about the flanks and thighs. And then to draw and extend as much as we can, upwards and downwards, yet without violence; for unless such extension be made, restitution is not to be hoped for, by reason of the processes and hollowed cavities of the vertebræ, whereby, for the faster knitting, they mutually receive each other. Then you must lie with your hands on the extuberancies, and force in the prominent vertebræ. But if it cannot be thus restored, then it will be convenient to wrap two pieces of wood, of four fingers long, and one thick, more or less, in linen cloth, and so to apply one on each side of the dislocated vertebræ, and so with your hand to press them against the bunching forth vertebræ, until you force them back into their seats, just after the manner you see before delineated." 232.

We may readily conceive the dreadful consequences which must have occasionally ensued, in tearing asunder newly-formed ankyloses, by these dangerous extensions and endeavours to reduce supposed displacements of the vertebræ! During the last century all spinal distortions were mechanically treated, and collars, backboards, stays, spine-supporters, &c. were multiplied.

ad infinitum. In France, the celebrated Madame de Montmorenci lost her life by the stretching and screwing process employed to make her straight.

"The ill consequences of the mechanical treatment of deformities of the spine, frequently presented themselves. Slight distortions were rendered worse, and bad ones were not mended, and on the recommendation of Mr. Baynton it became the fashion to condemn all persons, who either had, or were threatened with spinal deformity, to an undeviating horizontal posture for months and years. This is excellent practice in many cases of diseased bone and cartilage, but in debilitated states of the muscular system, the evil will be increased by such total inaction. Frequent failures threw this system and the inclined plane, which was a modification of it, out of fashion." 234.

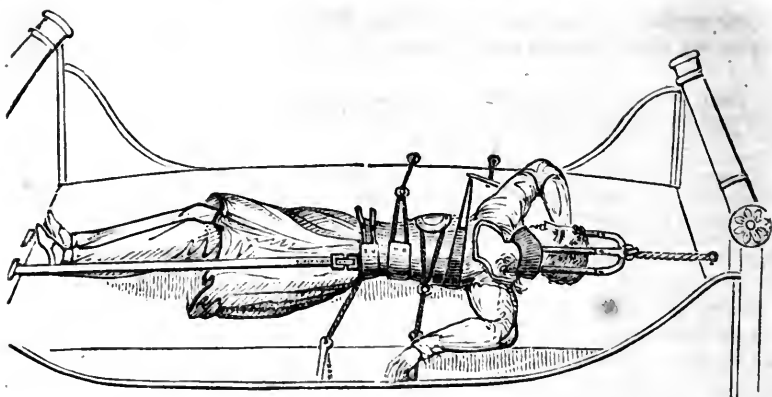
From the universal application of machinery in former times, we are now, Mr. Beale thinks, in danger of running into the opposite extreme—"of neglecting mechanical means and repose, and trusting too much to muscular exercise, gymnastics, and calisthenics." All the means enumerated are beneficial, when applied to the proper cases :—

"Various exercises in muscular debility, and in convalescence from diseases of the cartilages and bones: with the occasional use of spine-supporters in the intervals of repose and exercise: friction, manipulation and even pressure to lateral curvatures and projecting ribs: and undeviating rest in cases of caries." 235.

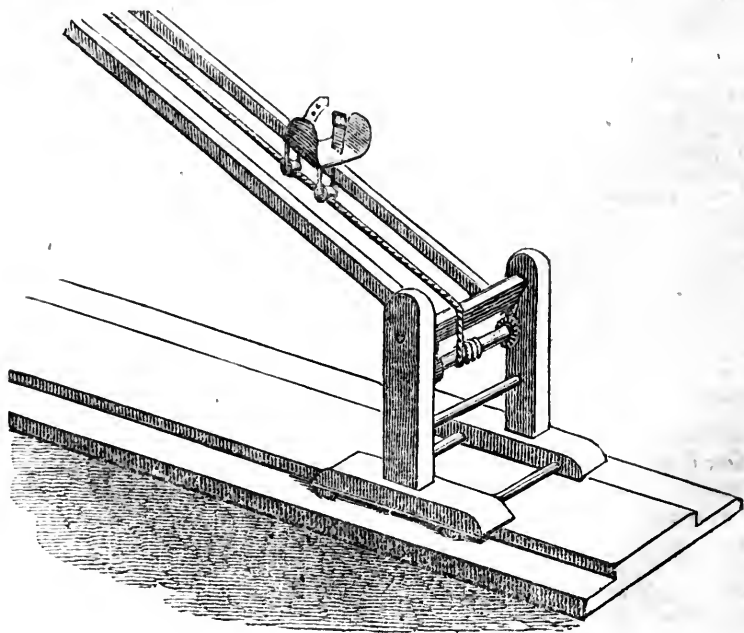
Machinery is used in the treatment of deformities on two principles—1st, to take off the superincumbent weight from bones, cartilages and ligaments, when these are diseased—2dly. to act on shortened, contracted, or rigid parts, and by extension to elongate them, or to bring them to their natural positions.

"Crutches are the simplest contrivances used on the first principle, when the lower limbs lose the power of supporting the weight of the body. The various backboards, collars, &c. used in curvatures of the spine are employed with the same view. Crutches have some advantage over corsets, and collars, inasmuch as they support the weight of the upper part of the body, without confining the muscles to total inaction. In walking, crutches should be of sufficient length to allow the extremity of the foot alone to touch the ground, and when attached to a seat, they should be high enough to raise the shoulders in the same manner as in the common mode of using them. The corsets employed in cases of distorted spine are occasionally useful, but much mischief has accrued from their indiscriminate employment. It must be obvious to every one, that where the primary source of distortion, is a debilitated state of the muscles, instruments which are employed to support the spine, to do, in fact, what the muscles should of themselves effect, so far from removing the deformity, will tend to the aggravation of the malady, they may conceal the defect but they never can cure it. Instruments of this kind are useful in slight cases of lateral curvature, and in convalescence from disease of the fibro-cartilages, in the intervals of exercise, during meals, and to relieve the irksomeness occasioned by long-continued recumbency." 236.

Our Gallic neighbours are almost mad, at the present period, in pursuit of machinery for the cure of distortions. Their MAISONS ORTHOPEDIQUES, vie with each other in the complexity of these machines. They not only stretch the spine, but apply mechanical means to act on the lateral contortions and inflections of the column. They keep up extension day and night, and their beds remind us of the bed of Procrustes, or the racks of the Inquisition. Here follows a specimen.



The above is taken from M. Delpech, a highly talented surgeon, who has great experience in the treatment of distortions. The essential purpose, Mr. B. observes, of all the complex machinery of the French, may be effected by a screw, similar to that of the tourniquet, acting on a bandage round the pelvis, the head being fixed in one of the common head-pieces of the inclined plane, by an apparatus similar to that seen in the above sketch.



The preceding wood-cut is copied from Delpech, and represents a contrivance by which exercise can be employed by convalescents from spinal diseases, as also in all cases where it is not yet proper to allow the weight of the body to press on the spine. By this apparatus a person can take exercise while in the recumbent position.

"The machine is supported on a basis, which moves on four rollers, in a grooved platform. The frame on which the cord is stretched, is connected with this basis by a pivot, by which the angle formed with the horizon may be altered. Below the axis there is a windlass in the frame which increases the tension of the cord. The car is mounted on the tense cord by two pulleys, one anterior and one posterior: its sides cannot be supported on the sides of the frame, without impeding motion, which renders it necessary to maintain the equilibrium, by the action of the lower extremities." 242.

Below is a figure practising this exercise, and in the act of ascending. The cord is borne down by the weight of the body, the knees are pressed against the sides of the frame to maintain the equilibrium of the car, the body is raised by the exertion of the arms pulling at the side rails. This exercise obviously calls into play most of the muscles of the arms, chest, and spine, together with many of those of the lower limbs.



We are unable to pursue the subject any farther—the foregoing being indeed only a specimen of the ingenious author's work, which we recommend as a very useful epitome and compilation, in all orthopedic pursuits.

VIII.

RESEARCHES PRINCIPALLY RELATIVE TO THE MORBID AND CURATIVE EFFECTS OF LOSS OF BLOOD. By *Marshall Hall, M.D.* 8vo. 1830.

One object of Dr. Hall's researches is to show the remarkable difference in the degree of tolerance or intolerance of loss of blood in different diseases—another object, and a very important one, is to establish the distinction between inflammations and irritations. Some observations on these subjects were published by our author ten years ago; but he has now enlarged on these topics, and added the testimonies of several living practitioners, in support of his conclusions.

The morbid effects of blood-letting have certainly not been studied so well as the curative, though they are not less interesting—syncope, delirium, convulsions, coma, and subsequent excessive reaction, are among the most conspicuous features of these bad effects of bleeding.

1. *Syncope.* It would appear that the primary cause of this phenomenon is defect of circulation in the brain, since posture alone relieves it; but then the deficiency of power in the heart must precede the affection of the brain. The respiration, the state of the stomach and bowels become secondarily affected. The efforts to vomit are succeeded by an amelioration of the syncope. The reaction which next takes place, may be excessive or defective—or it may be wanting altogether, and yield to an opposite condition—*sinking*.

2. *Convulsion.* Next after syncope, the most familiar of the immediate effects of blood-letting, is convulsion. It is more apt to occur in children, and in cases of slow and excessive detraction of blood. This is evidently dependent on affection of the brain—it is a phenomenon which shews that the brain may be “similarly affected by opposite states of the general system”—an observation as old as Hippocrates. It is evident that the constitutional treatment must be diametrically opposite in the two cases of repletion and exhaustion. Dr. H. conceives that convulsion occurring after blood-letting, usually denotes that too much has been taken away, often in the recumbent position, when a great deal of blood flows before deliquium is induced.

Case. “A physician, aged thirty-four, became affected with inflammation of the larynx. He was bled freely on two successive mornings at his own instance. In the afternoon of the second day, the disease being unsubdued, he was bled a third time, placed in a rather inclined position upon a sofa. The blood was allowed to flow until thirty-four ounces were taken. He then suddenly fell upon the floor violently convulsed; and he remained for some time afterwards in such a state of syncope as to render his recovery very doubtful; being carried to bed however, and cordials being administered, he slowly recovered. He did not afterwards suffer from the secondary effects of loss of blood.

“A similar case is given by Mr. Travers. This gentleman observes, ‘Some patients

cannot bear the loss of blood; it gives rise to prostration, attended with convulsions, in which the circulation fails so alarmingly as to require watching for several hours and the repeated administration of stimulants to restore it. A very intelligent surgeon in the neighbourhood of London, in bleeding a clergyman to the extent of twenty ounces, whose idiosyncrasy in this respect was not known, was compelled to remain with him during the whole of that day; and notwithstanding frequent recourse to brandy, continued long apprehensive for the patient's life. He represented the convulsions, which returned in paroxysms, as resembling the puerperal in their severest form. There has been reason to believe that the loss of blood in operations in which hæmorrhage was unavoidable, has sometimes induced this state; this, however, in the present advanced state of surgery is rare." 16.

3. Delirium. This occurs as an immediate effect of loss of blood, whereas mania is a more remote effect. Dr. Hall mentions the case of a young man who had lost much blood from the arm and by leeches, besides being briskly purged. He fell into complete syncope. Instead of laying him recumbent, they kept him erect, and thus protracted the deliquium for an hour and a half. He was found colourless and senseless, affected with rattling in the breathing. On being laid down the blood began to come to his face, and animation to increase. The pulse was quick, and he complained of deafness. To these phenomena succeeded severe rigor, great heat of skin, and delirium. These symptoms gradually subsided, and the patient recovered. Several other cases of an analogous nature are adduced as exemplifications of the injurious effects of inordinate loss of blood.

"Mrs. —, miscarried on the third month of her pregnancy. There was considerable flooding. On unthinkingly getting out of bed for some purpose, there was a sudden profuse gush of blood. She turned pale and nearly fainted. She was promptly carried and laid upon the bed, but soon became affected with convulsion. This was succeeded by delirium, which continued during two hours. A little brandy and water was given. She recovered in a few days.

"As might have been anticipated, delirium frequently occurs as an immediate effect of hæmorrhage during parturition. Still more frequently mania occurs as a remote effect of loss of blood.

"It is important to remark that delirium may occur even from the loss of a very small quantity of blood, in those cases in which there is what I have ventured to term intolerance of loss of blood, or in other words, great susceptibility to its effects, a subject which will be fully discussed in the second part of this work.

"Mrs. —, aged 40, had been, for some time, under medical treatment for a small tumour in the mamma. She was seized with rubeola; on the first and second days of the rash she was purged freely, too freely; on the third she was bled to eight ounces, and six leeches were applied to the chest, for a slight oppression felt there. Mrs. —, had also passed five nights totally without sleep, although on the evening of the second day she had taken twenty-five minims of the tinctura opii.

"Under the influence of these circumstances, Mrs. —, was seized with delirium. I saw her on the fourth day; there were constant delirium, a profuse perspiration, a trifling rash, and a feeble pulse of 120. I gave fifty drops of tinctura opii, and one dram of the spiritus ammoniæ aromaticus.

"I saw Mrs. —, again in four hours; the delirium had subsided into a state of obstinate silence, the patient sitting up in bed, refusing to answer questions, and having had no sleep; the skin and pulse as before. I directed one ounce of brandy to be given every hour, with beef tea.

"The first dose of brandy had produced sleep. It was directed to be continued every hour, at my visit in the morning.

"On the morning of the second day I was informed that eight ounces of brandy had been taken during the night; and that there had been much quiet sleep. I found the patient collected, the pulse 108, and less feeble; the skin still in a state of perspiration. The brandy was directed to be given every second hour. In the evening there was still further amendment. The bowels not having been moved, an aperient draught was prescribed to be taken early in the morning.

"This draught acted thrice. The delirium returned, and was removed by the brandy, which again procured sleep.

"From this time there was no recurrence of delirium. The perspiration kept profuse for some days, but gradually subsided; the pulse became gradually slower and stronger. There was afterwards a protracted affection of the chest." 22.

4. *Coma.* We are sometimes called to patients who are perfectly comatose after bleeding, and we are in doubt whether the case be or be not apoplexy. The history, the countenance, the pulse, the state of the extremities, and other symptoms, will help to guide us, after a little careful reflexion.

5. *Sudden Dissolution.* For examples of this the reader is referred to Dr. Hall's Commentaries on the Diseases of Females.

In the second chapter, the author treats of the more remote effects of loss of blood, or exhaustion—and first of exhaustion with excessive reaction.

"The reaction or recovery from ordinary syncope is generally a simple return to a healthy state of the functions, or nearly so, the pulse not passing beyond its natural frequency. In cases of profuse loss of blood, on the contrary, the recovery is not quite so uniform, and the pulse acquires and retains a morbid frequency for a certain length of time; this frequency of the pulse may gradually subside, however, and be unattended by any other symptom of indisposition of any consequence.

"The phenomena are very different, if, instead of one full bleeding to syncope, or of a profuse hæmorrhage, and even protracted syncope, the person be subjected to repeated blood-lettings or to a continued drain. In this case, within certain limits, the pulse, instead of being slow and feeble, acquires a morbid frequency and a throbbing beat, and there are, in some instances, all the symptoms of excessive reaction.

"This state of excessive reaction is formed gradually, and consists, at first, in forcible beating of the pulse, of the carotids, and of the heart, accompanied by a sense of throbbing in the head, of palpitation of the heart, and eventually perhaps of beating or throbbing in the scrobiculus cordis, and in the course of the aorta. This state of reaction is augmented occasionally by a turbulent dream, mental agitation, or bodily exertion. At other times it is modified by a temporary faintness or syncope. There is also sometimes irregularity of the beat of the heart and of the pulse.

"In the more exquisite cases of excessive reaction the symptoms are still more strongly marked, and demand a fuller description.

"The beating of the temples is at length accompanied by a throbbing pain of the head, and the energies and sensibilities of the brain are morbidly augmented; sometimes there is intolerance of light, but still more frequently intolerance of noise and of disturbance of any kind, requiring stillness to be strictly enjoined, the knockers to be tied, and straw to be strewed along the pavement; the sleep is agitated and disturbed by fearful dreams, and the patient is liable to awake or to be awake in a state of great hurry of mind, sometimes

almost approaching to delirium; sometimes there is slight delirium, and occasionally even continued delirium; more frequently there are great noises in the head as of singing, of crackers, of a storm, or of a cataract; in some instances there are flashes of light; sometimes there is a sense of great pressure or tightness in one part or round the head, as if the skull were pressed by an iron nail or bound by an iron hoop.

"The action of the heart and arteries is morbidly increased, and there are great palpitation, and visible throbbings of the carotids, and sometimes even of the abdominal aorta, augmented to a still greater degree, by every cause of hurry of mind or exertion of the body, by sudden noises or hurried dreams or wakings; the patient is often greatly alarmed and impressed with the feeling of approaching dissolution; the state of palpitation and throbbing are apt to be changed, at different times, to a feeling of syncope; the effect of sleep is in some instances very extraordinary, sometimes palpitation, at other times a degree of syncope, or an overwhelming feeling of dissolution; the pulse varies from 100 to 120 or 130, and is attended with a forcible jerk or bounding of the artery. 13.

The respiration is apt to be hurried, and attended with alternate panting and sighing—"the movement of expiration being sometimes obviously blended with a movement communicated by the beat of the heart." The skin is sometimes hot, and hurry and restlessness prevail. In this state of exhaustion, sudden dissolution is sometimes the immediate consequence of any muscular exertion, or even of being raised from the horizontal posture. The following case exemplifies some of the effects of loss of blood in a striking manner.

"Mrs. —, aged 28, of a stout constitution. After a delivery there was uterine hæmorrhage, which continued to recur for the twelve subsequent months. It was then discovered that Mrs. —, laboured under the polypus uteri; a ligature was applied, purgative medicines given, and the patient recovered. The effects of this loss of blood followed, however, and there were, 1. heating of the temples, a sense of violent 'knocking' in the head, pain, vertigo, dimness of sight, and singing in the ears, terrific dreams, and starting from sleep; 2. frequency of the pulse, pulsation of the carotids and aorta, fluttering and beating of the heart, faintishness, and a sense and fear of dissolution;—the palpitation of the heart was sometimes such on awakening as even to move the bed clothes, the bed, and, it is said, even the door; 3. the breathing was short and hurried, sometimes with panting, sometimes with sighing; 4. there were urgent calls for air, for opened windows, and the smelling bottle, and the nostrils and temples were required to be bathed with sal volatile or vinegar.

"The countenance, prolabia, and tongue were pallid; the legs somewhat œdematous; the bowels were irregular, the secretions morbid; once there was obstinate constipation; frequently the bowels were merely confined, sometimes with sickness, but always with an increase of all the symptoms." 33.

Exhaustion with defective reaction is the next subject of consideration. The opposite phenomena are mostly observed in young people of robust constitution, who have been subjected to repeated blood-letting. In infants, feeble persons, and persons of advanced age, reaction, after loss of blood, is apt to be defective. In this case the patient remains long pale, thin, and feeble, becoming faint on the slightest occasions. The pulse is frequent, but feeble, and perhaps irregular; and we have not the throbbing and palpitation so common in the opposite circumstances.

EXHAUSTION WITH SINKING.

"The symptoms of exhaustion with excessive reaction may gradually subside and leave the patient feeble but with returning health; or they may yield to the state of sinking. This term is adopted not to express a state of negative weakness merely, which may continue long and issue in eventual recovery, but to denote a state of positive and progressive failure of the vital powers, attended by its peculiar effects, and by a set of phenomena very different from those of exhaustion with reaction.

"If in the latter the energies of the system were augmented, in the former the functions of the brain, the lungs, and the heart are singularly impaired. The sensibilities of the brain subside, and the patient is no longer affected by noises as before; there is, on the contrary, a tendency to dozing, and gradually some of those effects on the muscular system which denote a diminished sensibility of the brain supervene, as snoring, stertor, blowing up of the cheeks in breathing, &c.; instead of the hurry and alarm on awaking as observed in the case of excessive reaction, the patient in the state of sinking, requires a moment to recollect himself and recover his consciousness, is perhaps affected with slight delirium, and he is apt to forget the circumstances of his situation and, inattentive to the objects around him, to fall again into a state of dozing.

"Not less remarkable is the effect of the state of exhaustion with sinking on the function of the lungs; indeed the very first indication of this state is, I believe, to be found in the supervention of a crepitus in the respiration, only to be heard at first on the most attentive listening; this crepitus gradually becomes more audible and passes into slight rattling, heard in the situation of the bronchia and trachea; there is also a degree of labour or oppression, sighing, hurry, blowing, in the breathing, inducing acuteness in the nostrils, which are dilated below and drawn in above the lobes at each inspiration; in some cases there is besides, a peculiar catching, laryngeal cough, which is especially apt to come on during sleep, and awakes or imperfectly awakes the patient.

"The heart has, at the same time, lost its violent beat and palpitation, and the pulse and arteries their bounding or throbbing.

"The stomach and bowels become disordered and flatulent, and tympanitic, and the command over the sphincters is impaired.

"The last stage of sinking is denoted by a pale and sunk countenance, inquietude, jactitation, delirium, and coldness of the extremities." 46.

EXHAUSTION WITH DELIRIUM.

This section contains only a case communicated to the author by Dr. Abercrombie.

We conceive that it was neither more nor less than a case of puerperal mania, and had little or nothing to do with the leechings which had been employed for the topical affection. As the case is short, we shall here give it.

"A lady aged about 35, after delivery of her fifth or sixth child, recovered favourably for a fortnight, when she became affected with pain and deep-seated hardness in the right side of the pelvis, painful to the touch, and accompanied by a considerable degree of fever. After repeated topical bleeding, and various other remedies, the febrile state subsided, the swelling lost its tenderness, and it seemed to be gradually diminishing in size; but its progress was slow; and, after three or four weeks from the time of its appearance, she was still confined to bed, and was suffering a good deal of uneasiness: her pulse was now calm, but she was considerably reduced in strength. At this time she was one day alarmed and agitated by some family occurrence of a trifling nature, and immediately began to talk wildly and incoherently; and, after a restless night, she was found next day in the highest state of excitement, talking incessantly, screaming, and struggling, with a wild expression of countenance, and a small rapid pulse. She was now treated by leeches to the temples,

cold applications to the head, purgatives, &c. but with little or no benefit; and, on visiting her next day, I found her sitting up in bed, with a look of extreme wildness, both her hands in constant motion; she was talking incessantly, loudly, and wildly, and I learnt that she had not ceased talking in this manner for one instant for the last twelve hours. Her pulse was rapid and feeble, and her countenance expressive of exhaustion. This was a state which I had repeatedly seen fatal under various modes of treatment, and I certainly expected no good of the case. But in consultation with a highly respectable medical friend who had charge of it, I proposed to try a treatment purely stimulant. A full glass of white wine was accordingly given, and ordered to be repeated every hour. On visiting her at the end of the fourth hour, I found her composed and rational; her pulse 90 and of good strength; and from this time there was no return of the symptoms. The tumour in the right side increased in size, suppurated, was opened, and healed favourably; and she is now in perfect health." 60.

EXHAUSTION, WITH COMA.

The following case was communicated to Dr. Hall by a friend. An opulent farmer, 60 years of age, tall and well formed, of active habits in the early part of life, and of sanguineous temperament, had suffered severely from gout, and for many years had suffered from spasms about the cardiac region, attended with urgent sickness and giddiness—in fact, "gout in the stomach." The biliary system was much deranged and jaundice had occurred. He had more than once been attacked with pneumonia, requiring one or more general bleedings. About five months before the fatal event, he suffered an apoplectic seizure, and his life was saved by active depletion. From that time his health became unsettled and his whole frame enfeebled. Depression of spirits was extreme, and he was harassed with cramps and sub-acute gout.

"After exposure in an open carriage, on one fine day, with the wind in the east, he was suddenly attacked with a severe pain in the abdomen, chiefly in the right hypochondrium and towards the stomach, the respiration being at the same time exceedingly painful and laboured. His medical attendant viewed the disease as acute hepatitis, and bled him profusely from the arm, and with immediate relief, which was rendered more complete by the free action of purgative medicines. There was a slight recurrence of the symptoms in the course of forty-eight hours, and large depletion from the vessels was again practised, so that at the end of three days, nearly seventy ounces of blood had been abstracted." 67.

This active work, in an old and enfeebled man, soon depressed the vital powers. The patient appeared bloodless and cadaverously pallid. The tongue was pale, the pupils dilated, the sight imperfect, the eyes glassy. There was subsultus, tendinum, jactitation of the limbs, suspirious respiration, pulse 100 to 120, irritable and throbbing. Cordials were exhibited, the powers of life revived, and the patient recovered so far as to be able to take airings in his carriage. But complete convalescence was never re-established, and in the course of a month he died suddenly. No examination of the body was obtained.

Amaurosis sometimes becomes the prominent symptom in exhaustion from loss of blood, of which Mr. Travers gives some good examples in his Synopsis of Diseases of the Eye. The following is an interesting case.

"A young medical man came to me one morning from the country in extreme anxiety, with an earnest solicitation that I would instantly apply a ligature to his carotid artery. This gentleman aged 25, was of short stature, and constitutionally healthy. His pupils were large and his countenance was suffused, and bore the appearance of preternatural determination of blood to the head. He had been the subject of two attacks of inflammation; one in April, the other in October of the same year; during which he lost upwards of an hundred ounces of blood. He had now a constant heavy pain in the head chiefly over the coronal suture, and in the direction of the sinuses, with tinnitus of the left ear. After stooping the giddiness was extreme, and a golden-coloured spot, edged with black, appeared floating before the eye. He had been troubled with muscæ in excess, for a year and a half past; he had now fire sparks flashing before the sight, and saw a pulse in the choroid synchronous with that of the wrist. When looking at near objects he was not troubled with muscæ, but they were always numerous, in proportion as the object was remote. He did not complain of much dimness. His complaints were not relieved by topical blood-letting. He recovered gradually but perfectly, under a regulated diet, and a course of the blue pill with saline aperients." 71.

The amaurosis from depletion is sometimes mistaken for its opposite—plethoric congestion. This is owing to the coincidence of a dilated pupil—muscæ volitantes, a deep-seated pain in the head, with occasional vertigo. It succeeds, according to Mr. Travers, somewhat abruptly to uterine floodings, and large depletion for acute diseases. The pain is not confined to the region of the orbit, though it generally affects but one side of the head.

"It is that peculiar nervous pain to which women are subject after uterine hæmorrhage, attended with a sense of defined pressure, as of an iron finger on the brain; and sometimes a distressing jarring noise like that of a mill or threshing-floor, or the rattling of the shingles as a heavy wave of the sea recedes. It is perhaps connected with an imperfect injection of the medullary substance. By a cautious use of tonics it is relieved; by whatever lowers or stimulates, whether diet or medicine, it is decidedly aggravated. The vision in this form of amaurosis is further enfeebled by the loss of as much blood as flows from two or three leech-bites. This is not imaginary; I have seen distinctly marked cases of it, in which large and copious venesection was still urged as the only resource of art. This I consider to be a fatal mistake." 72.

The fourth chapter is on "the *further* loss of blood in cases of exhaustion." Dr. H. is convinced, and so are we, that the symptoms of exhaustion, with re-action, are frequently mistaken for inflammation or other disease of the head or the heart. Under this impression, further recourse is had to the lancet—and, as the symptoms are perhaps greatly relieved, the wrong view of the case is confirmed.

"It was some time before I could fully comprehend the nature of this fact. I had satisfied myself that, in certain cases, the symptoms were those of loss of blood; and yet it appeared no less certain that those very symptoms were relieved by the lancet. At length I discovered, by a careful observation, that the symptoms which were relieved were those of re-action; and that the mode of relief was by the substitution of syncope; that the relief endured as long as the state of faintishness continued, but returned as this state gave way to the rallying and re-action of the vital powers.

"Another circumstance equally interesting and curious was, that within certain limits, the remedy which relieved for a time, eventually only added to the severity of the malady, for this was apt to return after a certain period, in a still more aggravated form. It is natural, indeed, to suppose, that, unless there was a tendency to the failure of the vital powers,

the reaction of the system and the painful circumstances attending it, would be greater after a third or fourth loss of blood, than after a first or second; indeed there are seldom the symptoms of re-action after one flow of blood, however great or profuse; it is the repetition or protraction of the cause which, as I have already observed, is essential to produce this effect.

"It is observable too that in cases of exhaustion with reaction, syncope is very soon produced by the further loss of blood. This fact is of importance, because it may be regarded as a sign of the state of exhaustion, when this is obscured by the re-action of the system, and as a warning voice against the further and inconsiderate use of the lancet." 75.

We must pass on to the 7th chapter, on the treatment of the various effects of loss of blood. Syncope, re-action, and sinking, each require the appropriate treatment.

"The constitutional treatment must be stimulant in syncope, sedative and soothing in the state of re-action, and restorative in that of sinking. The local treatment must vary with the organ chiefly affected, and with the mode in which it is affected.

"When syncope assumes a dangerous form, the principal remedies are, an attention to the posture of the patient, stimulants, and chiefly brandy, and the transfusion of blood.

"The effect of posture is not, even now, fully known. It would be easy to allow the patient to lie over the edge of the bed, the head low upon the floor, and the feet greatly raised. In this manner such pressure would be restored to the encephalon as would in many cases support life, until, other remedies being administered, the patient might be placed out of immediate danger.

"I need not, in this place, notice the importance of a regulated mode of giving brandy and nourishment. I think it is frequently given in such quantities as actually to induce sickness, and its own rejection from the stomach, and so as to frustrate the object of the physician completely. The effect should be carefully watched. The physician ought not, of course, in such a case, to leave the patient for a moment.

"The next remedy is transfusion. Unfortunately it has too frequently happened that the proper period of adopting this measure has been allowed to pass by. Not only the vascular system is exhausted, but, after a time, the functions of the nervous system have begun to fail. It might be a question, therefore, whether galvanism might not be usefully conjoined with transfusion." 190.

In case of excessive re-action, *extrême* quiet of body and mind is necessary—then the mildest sedatives, especially hyosciamus—lastly, gentle nutriment and TIME.

The second part of the work, on the "curative effects of loss of blood," we must reserve for another article.

IX.

A PRACTICAL TREATISE ON DIABETES: WITH OBSERVATIONS ON THE TABES DIURETICA, OR URINARY CONSUMPTION, ESPECIALLY AS IT OCCURS IN CHILDREN; AND ON URINARY FLUXES IN GENERAL. WITH AN APPENDIX OF DISSECTIONS AND CASES, ILLUSTRATIVE OF A SUCCESSFUL MODE OF TREATMENT: AND A POSTSCRIPT OF PRACTICAL DIRECTIONS FOR EXAMINING THE URINE IN THESE DISEASES. By Robert Venables, M. B. Physician to the Henley Dispensary, &c. &c. Octavo, pp. 214.

We must accord to Dr. Venables the credit of great zeal in the prosecution of his profession, and possession of a very respectable quantum of talent for the attainment of his laudable objects. Attached to a public institution, he loses no opportunity of acquiring that knowledge, therapeutical and pathological, which cannot easily be got, except through the instrumentality of such asyla for the indigent portions of society—and what is still more praiseworthy, he freely communicates the results of his observations and researches to his brethren and the public at large. Such conduct deserves every encouragement, however defective may be the attempts of individuals to add to the common stock of our knowledge; and the critic, who thoughtlessly deals out his strictures upon such undertakings, does not contribute to the public good, however he may plume himself on the superiority of his own penetration and acumen. It is much easier to criticise a book than write one, and the medical as well as the general reviewer should sometimes bear in mind the words of the great English satirist, when he dips his pen in gall:—

Let those judge others who themselves excell,
And censure freely who have written well.

Dr. Venables has undertaken a practical rather than a literary history of diabetes; and if any one is disposed to ask, has he any thing new to introduce, to compensate for the trouble of reading his book, this is his answer—“I have presented him with two facts in the history of diabetes, which are certainly worthy of attention: first, that an excessive discharge of urine is frequently a cause of tabes in children: secondly, that phosphate of iron proves, when properly administered, almost as certain an astringent upon the excessive action of the kidneys, as opium upon that of the alimentary canal.” These are facts which Dr. Venables avers that he has ascertained, and he has appended the history of several cases, in order that the reader may judge for himself.

Our author differs from some respectable authorities on the pathology of diabetes. He thinks we have no occasion to look to the sugar of vegetables separated in the stomach, to account for the saccharine properties of diabetic urine. “The morbid action of the kidneys is quite sufficient to account for the fact, and it is certainly infinitely more rational, and far more consistent with the doctrines of physiology, to attribute the evolution of sugar in the urine to a wrong or perverted action of the glands.” Dr. V. has not

attempted any division or subdivision of diabetes into the insipid, mellitic, serous, &c. The diabetes of the adult and of the child, as far as he is acquainted, arises from the same causes, and is to be treated in the same manner—hence there are no just grounds for division of the subject.

“There is a cause of emaciation among children, which has hitherto attracted but little of the attention of the Profession. I have often observed children to all appearance very healthy up to a certain period, when suddenly the constitution changes, the child emaciates, its health declines, and, without any obvious derangement sufficient to account for the gradual deprivation of health, at last dies a most miserable object. In such cases, the head, chest and abdomen, present no morbid appearances sufficient to account for the wasting and gradual decline of health. Accident led me to a discovery of the real seat of disease in such cases; and when the history of the complaint has been submitted to the reader, he will not be surprised that its nature and seat should have so long escaped general observation.

“Several cases of wasting having presented themselves to me, in which I was unable to detect any serious or permanent derangement of function—vital or animal,—I was at a considerable loss to account for the phenomena, as well as to direct the treatment. Occasionally the bowels were out of order, but their healthy functions were readily restored, without, however, any sensible effect upon the progress or severity of the disease. Sometimes dyspnoea attended, but evidently of a nervous nature; for the means which were applicable to the primary or secondary diseases of the head, speedily subdued this symptom, when those directly applicable to pulmonary affections proved, when not injurious, wholly useless. The head often seems to be the seat of disease, if we were to judge from the dull comatose state of the patient; but yet, upon dissection, the brain in many instances presented no diseased appearance whatever. In other cases, a partial but slight degree of vascularity has been observable, by no means, however, sufficient to account for the gradual, but commonly fatal, progress of the disease. From the tumid prominent abdomen, which generally, though not universally, prevails under these circumstances, we are naturally led to anticipate traces of disease in the alimentary tube, or some of the digestive organs. But dissection proves that our speculations are unfounded, for with the exception of flatus, which would of course account for the abdominal swelling, I have not been able to discover any other morbid appearances in these organs. When flatus has not been discovered, some slight thickening of the coats of the intestines may be observed, but in no way sufficient to account for the general symptoms.” 5.

Accident first led Dr. Venables to discover the real nature of the case. Upon one occasion he was given to understand that the different functions of the child were regularly and healthily performed. The head was free from pain, the respiration natural, the bowels free, and the secretions from them healthy. He was told there was nothing remarkable in the urine, but he found that it was discharged in very great abundance. This was not noticed, as it was attributed to the inordinate quantity of fluid taken in to satisfy the thirst, with which the little sufferer was harassed. When our author had ascertained that the wasting of the body, in this case, was attended by an excessive discharge of urine, he had little difficulty in viewing them as cause and effect. On more minute examination he discovered diseased appearances in the kidneys sufficient to account for all the symptoms. He ventures to assert that many children have been treated for hydrocephalus, mesenteric affection, rickets, &c. who have really fallen victims to this form of disease. The urine of children is so little attended to, either

by mother, nurse, or medical practitioner, that derangements of this secretion too often escape detection. Diabetes indeed is seldom observed in its incipient stage; and when it has made progress, it simulates so many other diseases, that the real character of the complaint is not developed till its history is either wholly lost, or so confounded with symptomatic or secondary affections, that it can no longer be unravelled. Our author next proceeds to a graphic description of the disease, more especially as it affects children; and this being among the most original portions of the volume, our quotation shall be more free than usual.

"The disease seldom if ever appears till after the child has been weaned. The reason of this, perhaps, is, that the exciting causes are seldom applied till after this period. A child which has continued healthy up to this time, will perhaps suddenly lose its usual flow of spirits, become dull and inactive, and although no obvious disease may be recognisable, yet the child will not appear in its usual health. It begins after a very little time to waste in flesh, and then gradually continues to emaciate. The skin becomes harsh, dry, and flabby, and seems to hang loosely about the body. The temperature is generally very much elevated, and, in the description of nurses, it will be said that 'they burn like a coal of fire.'

"In the early stages of the disease, the bowels are regular, and little or no deviation from the natural and healthy appearance of the alvine discharges is remarkable. The tongue also at the beginning indicates no symptom of disease, but when it has continued for some time, and produced some degree of fever, then the tongue becomes covered with a coat of mucus. After a continuance, the bowels begin to act irregularly, the appearance of the evacuations deviating from that of health. Sometimes they are of a greenish hue, at other times they appear natural when passed, but become greenish some time after being voided. In adult cases, constipation very generally attends.

"At a more advanced period, the abdomen seems preternaturally full and distended.—The abdominal prominence frequently leads to the supposition of mesenteric disease, an opinion which is still farther confirmed by the progress of emaciation. I doubt much if the mercurial purges, which are exhibited under such circumstances, be wholly innocent. I have some reason to suspect that they have done considerable harm.

"The pulse from the first is generally accelerated, and has a hard, wiry feel. Those who are much in the habit of examining the pulse in children, would recognise in the sensation which the pulse at this time gives, an indication of very great irritation in the vascular system.

"The most remarkable symptom, however, although it frequently escapes observation, is the inordinate discharge of urine. This discharge increases in quantity so gradually, that it is not usually noticed. By the time it has become more remarkable, great thirst prevails, and hence it is neglected or unnoticed, because the parents and friends conceive an excessive discharge of urine, and an excessive consumption of fluid, as naturally associated.

"With respect to the qualities of the urine, they will be found to vary in different cases. In some, the urine appears quite limpid; in others it appears milky, or like a mixture of chalk and water. Sometimes it is of a pale straw colour; and in a case which is at this moment under my care, I find it is of a green colour. The urine sometimes seems milky, dense, and its specific gravity is much increased. It frequently coagulates by heat, or by the addition of the different re-agents. When the quantity of coagulable matter bears any thing like an equal ratio to the watery portion of the urine, and the discharge is much increased, the emaciation under such circumstances proceeds rapidly and extensively.

"As the duration of the disease is prolonged, other symptoms, proportioned in some

degree to its severity, set in. Frequently the sensorium becomes affected at an advanced stage; hence headach, vertigo, and even temporary delirium, occasionally attend. When a fatal termination takes place, the patient often dies comatose, and sometime apoplectic.

"The skin is usually dry and harsh to the touch, and this whether there be fever or not. Generally, however, at an advanced period, there is a considerable degree of fever. As the disease advances, the patient is attacked with remittent fever, occasionally accompanied with profuse perspiration at night. This fever has been regarded as partaking of the character of hectic; and should any cough, with or without expectoration, be present, (by no means an unfrequent occurrence,) the patient may be considered as labouring under phthisis, instances of which I have occasionally seen.

"When diabetes has continued for a long period, it frequently terminates in anasarca or general dropsy. Hence the ancles become œdematous, and the patient, from having been reduced to nearly a skeleton by emaciation, becomes bloated from the accumulation of dropsical fluid in the cellular membrane.

"In children, about this period, the abdomen becomes sensibly enlarged. This enlargement, by a careless observer, may be mistaken for ascites, or some mesenteric affection. Ascites frequently supervenes in adults, but more rarely in children. Disease of the mesentery is to be regarded as an adventitious rather than an essential occurrence." 16.

In diabetes the digestive function is, of all others, the most liable to disorder. Dr. Venables thinks it the consequence rather than the cause of the diabetes.

Morbid Anatomy.

This our author confines to the kidneys and urinary organs. He avers that "diabetes never exists to any extent, without the kidneys presenting on dissection manifest changes."

"These changes vary from a trifling vascularity to severe organic derangement. Sometimes the kidneys are much inflamed, and present a florid vascular appearance, in other cases the venous system of these organs seems enlarged and turgid with blood. In a case which I examined about five years ago, the kidneys were enlarged in size, dark-coloured, and seemed turgid with blood. On cutting into the substance, there was an instantaneous effusion of fluid dark-coloured blood, as happens when a congested liver is cut into. Sometimes the veins, on their external surface, form a complete net-work of vessels. In some cases the kidneys are found in a loose, flabby state, being at the same time much increased beyond their ordinary size. They are often of a pale or ash-colour.

"In some instances the substance of the kidneys is much inflamed, and then they present an appearance of a high degree of arterial vascularity. Their substance feels dense, and their stricture firm. Frequently, under such circumstances, a whitish fluid resembling pus is found secreted in some quantity in the infundibula.

"The kidneys do not often contain abscesses, but I have seen two cases in which they were ulcerated. In these cases, the pus occasionally passed with the urine, and was mistaken for flakes of coagulable lymph, which it very much resembled. The ureters are often enlarged in diameter; and a respected medical friend informed me, that he once saw a case in which the internal surface of one ureter was ulcerated. It is natural enough to expect that these vessels should be enlarged in such a disease; but I have not met with a case of ulceration. This, however, may have been owing to my not having been prepared to expect and, consequently, not having uniformly looked for such an effect. The renal or emulgent arteries are very often found larger in diameter than natural. Generally speaking, both kidneys are diseased, but sometimes only one, or at least only one to any great extent.

"The bladder is sometimes found rather vascular, and turgid on its mucous surface; sometimes the mucous surface is inflamed. The substance of this organ, is, in some cases thickened, and very firm in its texture. I saw a case, which was examined by an eminent surgeon* in Dublin, about fifteen or sixteen years ago, in which the mucous coat of the bladder was tuberculated, and elevated into large, thickened, hard, and irregular plicæ.—In several spots it was exulcerated, and, in this case, I learned that there was frequently a considerable discharge of sanio-purulent urine.

"There are diseased appearances occasionally observed in the other viscera, as the brain, lungs, heart, liver, spleen, pancreas, and the other digestive organs; but as a great variety of these occur, and as diabetes frequently prevails without as well as with them, and sometimes with one description, and sometimes with another,—they are to be regarded rather as accidental occurrences, than as absolutely and essentially a part of the morbid anatomy of the disease; and therefore their consideration can have no place here." 20.

Remote Causes.

Among these our author ranks all those agents which inordinately stimulate the kidneys, as spirituous liquors, excesses in acids, alkalies, strong diuretics, mercurial courses, eruptive diseases, particular articles of diet, as asparagus, foreign acescent wines, intemperance of every kind, inordinate bodily exertions, blows upon the loins and region of the kidneys, strong mental emotions, hereditary disposition depending on peculiar structure of the kidneys, derangement of the digestive organs, though not so frequently as Dr. Rollo would wish us to believe.

Immediate Causes. Dissection, according to our author, has shewn that this disease is invariably attended with some manifest changes in the *structure* of the kidneys, and hence he thinks that a mere functional disorder is hardly adequate to the production of permanent affection. Of the precise nature of these organic changes we are at present ignorant.

Pathology. By this term our author means "those morbid operations by which morbid effects are produced"—in other words, the mode in which the remote or exciting causes act in producing diseases. Dr. Venables makes several weighty objections to Dr. Rollo's doctrine of diabetes:

"Were Dr. Rollo's views not otherwise objectionable, the fact that the urine, in many instances, is not saccharine, until after some continuance of the disease, would be alone sufficient to invalidate them. If the saccharine properties of the urine were owing to the separation of this substance by the kidneys, from its commixture with the blood through the faulty action of the stomach, it naturally follows that the urine, from the first augmentation of its quantity, should contain saccharine matter. Here, then, are two strong objections to Dr. Rollo's theory; first, the blood does not in every instance contain sugar; secondly, the urine is not saccharine until the disease has lasted for some considerable time."

32.

After some experiments which our author made on the state of the urine upon the ingurgitation of certain fluids, he comes to the conclusion "that diabetes more frequently arises from a peculiar excitement of the kidneys originating in the direct application of stimuli to their substance."

* Mr. Peter Harkan.

"At first the excitement is only occasional, and the effect subsides; but the repeated irritation of organs, we well know, brings on inflammatory action, and at last disorganization. It has been observed, in discussing the morbid anatomy of the kidneys in diabetes, that they generally exhibit morbid vascular appearances, and frequently considerable disorganization of their structure. The first effect of the irritation is merely an increase of their natural functions, and more urine is separated, than under their natural action would be effected. The qualities of the urine, too, are not affected, or at least not sensibly so, at first, nor until after the repeated application of the stimuli. But, by repeated excitement, not only are their functions increased and sensibly perverted, as is indicated by the coagulation of the urine, and its saccharine properties, but also their structure and organization become seriously affected." 38.

We shall pass over a great deal of this chapter, and also that on *diagnosis*, since few people can mistake the disease, if they make a proper investigation of the symptoms. We have seen these, however, overlooked by men of great capacity, till a patient was at the verge of the grave, and that from mere inattention. Emaciation, thirst, voracious appetite, dry harsh skin, with a frequent and copious discharge of urine, especially if it be saccharine, are sufficiently characteristic of this terrible malady.

The *Prognosis* in diabetes has been generally unfavourable. Dr. Venables is not quite so desponding, especially where the disease is early detected.

"We may generally infer, (*ceteris paribus*,) the earlier medical treatment has been instituted, the greater the probability of a perfect recovery. When, from the duration of the disease, we have reason to suspect serious organic changes in the structure and mechanism of the kidneys, we must then be more guarded in our prognosis, and not excite hopes or expectations which probably will never be realized." 48.

Our author has seen recoveries effected "under the most unpromising circumstances," but these are no more than exceptions to the general rule. Our prognosis, in fact, must be founded on the state of the constitution as a whole. Where it is bad there is little hope—where no other particular organ or function is threatened than the kidneys and their secretion, some chance is left.

TREATMENT.

The first object, in our author's therapeutics, is to restrain the inordinate action of the kidneys, and therefore it will be necessary to search for the real exciting causes, and remove them, if possible. No treatment can be successful while the causes that produced them continue to act. If an infant, the nurse's milk should be examined, and if found to be aced, the nurse should be changed. If an adult, a strict inquiry should be made into the diet, habits of life, &c. The mere removal of causes or correction of bad habits, however, will not cure the disease, if established. There is one fact, which we have learnt from experience, namely, that excessive discharges from the system are moderated by bleeding, independent of any inflammatory condition obtaining at the time; and in this way, Dr. V. observes, venesection may have often proved a powerful means of restraining the urinary flux, in cases where there was no indication of inflammatory action in the kidneys. But as dissection has often shewn a turgid vascu-

larity of those organs, the utility of venesection becomes still more evident. Dr. Venables' experience coincides with that of Dr. Watt of Glasgow, and some other writers, on this point of practice in diabetes; and he almost invariably adopts venesection, either as a preparatory or curative measure.

"We should not be deterred from repeating the bleedings, merely because the blood does not exhibit the buffy coat, the usually received characteristic of inflamed blood. I have in another place suggested the probability of the characters of the serum being capable of indicating an inflammatory state of the system. I have generally found that a dense milky appearance of this part of the blood indicates inflammatory action, and this independently of the appearances presented by the coagulable part. I have found the pulse rise under such circumstances after venesection, and a repetition of the operation required; although the crassamentum should not exhibit the buffy coat, but even seem infirm and dissolved."

59.

The extent to which the measure should be carried can only be judged of by the practitioner in attendance. Repeated small bleedings, however, are preferred by our author to fewer large ones. General bleeding is the best; but if in infants, leeches to the region of the kidneys may be a good substitute. Blisters to the neighbourhood of the plethoric organ are advised by Dr. V. but caution is necessary lest they stimulate the kidneys. They should be kept open by the ceret. sabine rather than the lytta. If there is reason to suppose that considerable organic disease obtains in the kidneys or spinal marrow (a part suspected by our author) then caustic issues should be employed.

Our author makes many judicious observations on the various internal medicines which have been recommended in diabetes. He thinks they have acted more by increasing other secretions than by restraining directly the urinary discharge. After speaking of various tonics and restringents, our author proceeds thus:—

"These facts led me to the conclusion, that some of the metallic phosphates might be advantageously substituted for those with an alkaline base. The tonic and astringent properties of iron and zinc pointed them out as the best suited to the object in view. I selected iron for my first trial, and I have felt so satisfied with its powers, that I have not attempted any farther investigation. I have been really struck with the efficacy of the phosphate of iron in excessive discharges* of urine. The quantity is rapidly reduced under the use of this salt, and indeed its qualities sensibly altered. The bulimia which also attends on diabetes is reduced, and the powers of digestion invigorated and increased.

"The phosphate of iron is readily formed by the admixture of solutions of sulphate of iron and phosphate of soda. The resulting salts are sulphate of soda, which, being soluble, passes through, while the insoluble phosphate of iron remains on the filter.

"Phosphate of iron may be given as an astringent in doses of one or two grains, which may be gradually increased to a scruple or half a drachm three or four times in the day. In children, smaller doses should be given, but the exposition of the rules for apportioning

* "In rickets, carbonate of iron is usually combined with the phosphate of lime, and the combination is found more efficacious than either singly. I have no doubt that decomposition takes place, for in the animal laboratory, the laws of chemical affinity are set at defiance, and those compounds evolved which are most suited to the living purposes."

them according to the ages of the patients, belong to a different branch of medicine. It may be observed, that after a continued use of any medicine the dose must be gradually increased, or otherwise its effects will begin to diminish. Sometimes it is useful to suspend the use of the medicine for a short time, and then to recommence it again. In this way the susceptibility of the system is often revived, when it would not be safe to attempt the same object by any other means." 72.

Of the various disorders which accompany diabetes, and which are looked upon by some as the cause of the disease, Dr. Venables has given a full account, with very clear and judicious directions for the treatment of them. We refer the reader to the seventh chapter for very excellent therapeutical and dietetic observations. The eighth chapter also, on Prophylaxis, is worthy of attentive perusal.

In an extensive appendix, our author has detailed eighteen cases, and two dissections of diabetes. Of these, ten are examples of the urinary flux of children, and form the most novel, and, we think, the most important part of the work. On this account we shall endeavour to convey to our readers a sketch of some of the cases to which we allude.

Case 1. A little boy, aged five years, had been ailing for nearly two years. He first became dull and listless, and then emaciated. He frequently complained of his head—eyes were prominent—pupils rather dilated—bowels occasionally disordered. In the progress of the complaint the abdomen swelled a little, and mesenteric affection was suspected. The appetite was always good. Cough took place, and then phthisis was feared. Several practitioners were consulted, and various plans of treatment were adopted, without benefit. The child ultimately came under Dr. Venables. He also tried various means, abandoning one after the other. The little patient at length became generally dropsical and died. It was now ascertained that, previously to the dropsical symptoms, the boy had had a great flow of urine—sometimes as much as eight pints per diem. When the dropsy supervened, the urinary secretion diminished.

Dissection. There was nothing remarkable in any of the abdominal viscera, except the kidneys. These organs were found in a very diseased state. The right kidney was enlarged, and its vessels turgid with blood.—The substance of the viscus felt soft and flabby to the touch, and on cutting into it, a dark-coloured fluid flowed out in abundance. The left kidney presented nearly a similar appearance, but not to so great an extent.

Case 2. A woman who had suffered from diabetes for a long time, at length became dropsical and died. She had always complained of severe pain in the loins. On dissection, the spinal marrow was examined, and the theca vertebralis was found very vascular—the medulla spinalis itself felt unusually hard throughout its whole extent. In one spot it seemed dissolved or softened down into a kind of excavation, not apparently from any thing like ulceration, but as if it had been scooped out at that spot. The excavation was about half an inch in length, situated between the last dorsal and first lumbar vertebrae. A degree of low inflammation seemed to have pervaded a considerable portion of the column, both above and below the excavated part, as evinced by depositions of coagulable lymph, &c.

This case has been introduced with the view of exciting the attention of practitioners to the examination of the spinal column in diabetic dissections, in order to ascertain whether that organ bears any part in the pathology of the disease. We are of opinion that, in the present case, the two affections were mere coincidences. This, however, is only matter of opinion.

Case 3. Our author accidentally saw a little child about eighteen months old, that had been weaned ten months. After weaning its spirits failed, its health declined, and it gradually wasted, till it appeared like a skeleton.—The appetite was, all this time, voracious, and the thirst insatiable. The abdomen was full, prominent, and hard to the touch. The bowels alternately costive and relaxed—stools frequently green—skin hot and dry, but loose and flabby—cough. It was said that the urine was natural, but, on particular enquiry, it was found to amount to four pints in twelve hours.—It had a wheyish appearance, but little taste or smell—did not coagulate by heat or nitric acid. After opening the bowels, chlorine was administered, and then two grains of the phosphate of iron, half a grain of rhubarb, and three of the pulvis aromat. thrice a day. In a fortnight or three weeks the urine was reduced to a quart in the twelve hours. The phosphate was gradually increased, and in six weeks the urine was reduced to the natural quantity. The appetite had now entirely failed—the phosphate was left off, and proper means were used to restore the general health. The child perfectly recovered.

Case 4. A boy, aged ten years, had been declining for upwards of two years. There was now considerable emaciation, with head-ache, thirst, occasional nausea—pulse hard, frequent and contracted—cough—dyspnoea—hurried respiration—abdomen full and prominent—bowels alternately constipated and relaxed—evacuations of a good colour—skin dry—febrile heat—appetite keen—urine eight pints per diem, containing a good deal of coagulable lymph, and was sensibly saccharine. The boy had dull obtuse pain in the back and region of the kidneys. Hydrocephalus had been suspected, and mercury employed, but no relief was obtained from any treatment. Dr. V. ordered blood to be taken from the arm, and small doses of antimonial and Dover's powder to be given, at proper intervals—the bowels to be kept open by senna and jalap. The blood being buffed and cupped, venesection was repeated, at first weekly, and afterwards monthly, gradually diminishing the quantity. Leeches were applied to the loins, and mustard cataplasms to the region of the kidneys. The effect of this treatment was a reduction of the febrile heat, relaxation of the skin and softening of the pulse. The urine was reduced a quart a day from the former quantity, and the coagulable matter disappeared. It became, however, more sensibly saccharine. The phosphate of iron was now administered, in combination with a light bitter and rhubarb. At first it was given in doses of three grains daily, afterwards fifteen grains. The improvement soon became remarkable—the febrile thirst and the keen appetite disappeared—the urine greatly diminished, and void of its saccharine quality. The patient soon regained flesh and strength, and quite recovered.

Case 5. A. Sandys, aged eight years, complains of weakness, head-ache,

cough, dyspnœa, and a variety of other symptoms simulating phthisical affection. There was great emaciation, urgent thirst, voracious appetite, fever, hard pulse, furred tongue, and constipated bowels. The alvine discharges were unnatural, being almost as dark as pitch—abdomen full and prominent—pain in the right hypochondrium, with manifest fullness there. The urine measured from six to eight pints in the 24 hours, being sweetish, pale, and transparent. There was pain in the loins and aching of the spine, when in motion. Pressure on the region of the kidneys excited nausea and even vomiting. This child had been delicate from birth. She had lately had small-pox, hooping-cough, scarlatina, and measles, after which the pulmonary symptoms had come on. Blood was taken from the arm, and leeches applied to the hypochondrium. Small doses of calomel were also prescribed to correct the state of the liver and bowels; but it produced irritation and was left off. All other preparation of mercury also disagreed. The taraxacum and chlorine succeeded better, and the fæces became natural. No alteration in the urinary secretion—the diuresis continued excessive. The phosphate of iron, in doses of three grains, thrice a day, was given, and leeches were applied to the loins. The phosphate was gradually increased. But although it controlled the urinary discharge, it oppressed the stomach, which effect was relieved by a mustard cataplasm to that region. The sweetness of the urine was gradually but slowly removed under the continued use of the phosphate, and the discharge itself considerably reduced. Amendment took place to a certain point, but could not be pushed further. An issue was therefore inserted on each side of the spine. The general health was supported by bark, and the phosphate was continued. At the end of five months the little patient was so far convalescent that the caustic issues were removed—she was sent to the sea, whence she returned perfectly well.

We have now furnished our readers with a few examples of the numerous cases, detailed at length by Dr. Venables, and also an outline of the principles and modes of treatment which he has laid down. The young practitioner in particular will do well to peruse the whole work, and indeed much information will be derived from it by every class of the profession. We tender the able author our thanks for the pleasure and instruction we have received from an examination of the publication, and beg to express to him our sincere wishes for a continuance of that zeal and ability which he has shewn in the prosecution of medical science.

X.

THE INFLUENCE OF CLIMATE IN CHRONIC DISEASES. &c. By *James Clark, M. D.* Second Edition. 1830.

In a former number we gave an ample analysis of Dr. Clark's valuable work, and we are happy to see a new edition so soon in the field. In this article we shall only notice, of course, the additions which Dr. C. has made

to the first edition. It appears that our indefatigable author took great pains, not only to collect information respecting the climate of various places to which invalids repair in this country, but to visit many of them personally, in order to judge for himself. The principal additions to the climate of England are under the heads of Undercliff in the Isle of Wight, and Clifton. The salubrious climate of the former is, however, rendered almost nugatory by the absence of accommodations for invalids. It is to be hoped that, in these days of speculation, some of our moneyed men will employ their capital in erecting houses along that romantic range of terraces on the South coast of the Wight, where more health might be secured than in any part of the boasted Italian territory. In this article, however, we must dedicate the few pages we have to spare, to a consideration of those localities which are inclosed within, or placed beyond the Atlantic Ocean.

There are various islands, or groups of islands, in the Northern Atlantic which deserve more consideration in respect to climate, than they have hitherto received. The Bahamas, Bermudas, Canaries, and Azores are the principal places worthy of notice.

I. The Bahama Islands are on the very borders of the Tropics; but their immediate vicinity to the American continent so modifies their climate, as to give it a very different character from that of the inter-tropical inlands. These islands are all low and chiefly composed of a coarse sand and stone. They contain no natural springs, and the trade winds are not very regular there. The southerly winds are hot and oppressive, accompanied by a heavy deposition of dews in the night. The North wind frequently prevails and lowers the temperature. While the Winter temperature is nearly six degrees, and the Spring two degrees colder than Barbadoes, the Summer is three degrees hotter.

"The Bahama islands generally speaking, are not unhealthy; although there is a considerable difference in this respect, between the different islands. That of New Providence, in which is the capital, Nassau, the only town in the colony, is not by any means one of the healthiest; on account chiefly of some swampy ground which it contains. The small island, called Harbour Island, close to Eluthera, one of the largest of the group, is esteemed particularly healthy, and forms the chief resort of invalids and convalescents from New Providence. There are several other healthy spots, as on the Island of Abaco; but at all these places there is a great deficiency of accommodations, and moreover, they are sixty miles distant from Nassau, the only place where medical advice is to be found." 4.

II. BERMUDAS.

This group consists of a numerous cluster of small islands, resembling in features and stricture the Bahamas. The highest ground on any of them does not exceed 200 feet above the sea. The soil is arid, from the absorbing nature of the Bermuda rock, and there is hardly any other than rain water.

"The cool season, that is, from October till May, is the most healthy, and the only part of the year during which this climate is at all suited to invalids. One of the principal objections to Bermuda, as a winter residence for pulmonary invalids, is the prevalence of strong winds; which are such as still justify the epithet applied by Shakespeare to these islands, 'the still-vex'd Bermoothes.' Of these winds the damp oppressive south-west is

the prevailing; but the most violent and injurious to delicate invalids during the winter and spring, are the north-west winds which are generally dry, sharp, and cold. Compared, however, with the climate of the coast of America, under the same latitude, Bermuda may be said to have no winter. The summer is very hot, being generally admitted, I believe, by those who have experienced both climates to be more oppressive than the same season in the West Indies. This may be accounted for, partly from the want of the trade winds, and partly from the bare, arid nature of the soil, which becomes quite parched during the summer. Vegetation almost disappears at this season; the cedar and wild sage alone resisting the heat. Dew is occasionally deposited in winter, when a cold night succeeds a hot day, but never in the summer."

Lying in the same parallel of latitude with Madeira, the Bermudas are far inferior to the former in point of climate. The summer temperature of Bermudas is tropical, while that of Madeira is very moderate, owing, no doubt to the influence of the trade winds, and its mountainous character. The Bermudas are not therefore likely to become favourite residences for invalids.

Over the Canaries we may pass, as they possess few, if any advantages over Madeira, and are far inferior in many respects. The Azores possess a climate, we believe, superior even to that of Madeira; but the want of accommodations and of medical advice must, for a long time to come, render the fineness of the climate nugatory.

III. WEST INDIES.

Of late years a good number of invalids have resorted to the West Indies to escape the English Winter. It becomes therefore some object to investigate the climate of these islands. Dr. C. confines his observations to the windward or Caribbean Islands, which are those most likely to be frequented by invalids. There is considerable difference in the salubrity of these isles, and in the different localities of the same island. Generally speaking the high islands are the more healthy—the low and marshy insalutary. Unfortunately most of the harbours in the West Indies are in the immediate vicinity of swamps or marshes, the towns being built more with reference to commerce than health. The islands which Dr. C. proposes to notice are, Barbadoes, St. Vincent, St. Kitts, and Antigua. These possess advantages for the invalid which render them preferable to all other parts of the Caribbean Isles. St. Vincent and St. Kitts are mountainous—Barbadoes and Antigua low; but as St. Vincent lies in the neighbourhood of Barbadoes, and St. Kitts near Antigua, the invalid has an opportunity of changing from low to high ground, and vice versa, as occasion may require.

"The mean annual temperature of the West India Islands, near the sea, is about 79° or 80°. The mean daily range is only about 6°, and the extreme annual range is not more than 20°. The mean temperature of the sea, at considerable depths in the vicinity of these islands, is 80°; and this is also the temperature of the springs near the level of the sea in Jamaica, as noticed by Dr. Hunter. The mean temperature of some of the habitable spots of the mountain ranges is probably not more than 65° or 70°.* The mean temperature of

* On the summit of the blue mountain peak, the highest land in Jamaica, 7,555 feet above the level of the sea, the thermometer was found to range from 47° at sun-rise, to

the seasons, according to the European division adopted in this work, is at Barbadoes as follows,—Winter, 76°7; Spring, 79°; Summer, 81°; Autumn, 80°.

"The above applies to the whole of these islands near the level of the sea; the difference in different islands being scarcely worth remarking. The mean temperature of Barbadoes, according to Hillary, is 79°3; the greatest range in six years being 17°, viz. from 70° to 87°: and Dr. Thomas makes this only 18°, from 70° to 88°. Sir Gilbert Blane once found the thermometer in this island at sun-rise, in December, at 69°. Dr. Hunter observed it once only at the same degree; and twice only as high as 91° in Jamaica. The greatest range which I find noticed by any author at the sea level is 22°, viz. from 70° to 92°. Dr. Fergusson says, the mean daily range in summer is from 80° to 86°, and in winter from 70° to 80°. The mean temperature of Grenada, at noon, according to Dr. Chisholm, is 84°, and at seven a. m. 78°5. This gentleman gives the following, as the diurnal progression of temperature. 'The Thermometer (Fahrenheit's) almost universally exhibits the following movements. At seven a. m. the mercury begins to rise, and continues to do so till one p. m., from which time to four p. m. it is stationary. It then begins to fall, and continues to do so till ten p. m., from which time till seven a. m. it is again stationary. This routine of temperature is disturbed only when any remarkable change takes place in the atmosphere, such as, much rain attended with strong wind: the greatest change from this cause I have observed is 10°, the least 4°. The thermometer, exposed to the direct rays of the sun, has risen in ten minutes to 130°, or 42° above its stationary point at one p. m. of that day; 30° may, however, be considered the medium difference between the heat of the shade and in the sun. The medium difference between the heat of the atmosphere at one and ten p. m. is 9°.' 17.

The Winter and early part of the Spring is, in general, remarkably dry, and the weather fine, the wind being more northerly than usual. The Summer is dry and hot—the Autumn affected with heavy rains. There is but little of that continuous rain which we see in Europe. A medical friend informed our author that he had repeatedly examined, in every season, and at various hours of the night, the grass and bushes of the Caribbean Islands, but never found them even damp, from the slightest precipitation of dew. This remarkable fact seems accounted for by the small diurnal range of temperature in these Islands.

"From the small size of the greater number of these islands, there does not occur the regular alternations of land and sea breezes which prevail generally in tropical climates, but the same circumstance admits of the constant influence of the easterly, or trade wind, without intermission. This wind prevails, with great regularity, for nine months of the year. During August, September, and October, the season of rain and hurricanes, the trade winds are much more irregular, but still the prevailing wind is decidedly the East. It is chiefly owing to the full influence of this wind that the climate of the West India Islands is tolerable; and that the temperature of the air at sea is so uniform."

"From this account of its temperature alone, there is no difficulty in drawing the conclusion, that the climate of the West Indies is an improper one, generally speaking, for consumptive patients. It is too hot during the night; and during the day, the high temperature and cloudless skies almost entirely defeat one of the chief objects for the attainment of which the invalid migrates to a warmer climate; I mean exercise in the open air. He could scarcely venture to take exercise, even on horseback, after seven o'clock in the

morning, during the coolest season; and, as there is hardly any twilight within the tropics, he would not be able to enjoy the coolness of the evening, in this way. If we have found cause to condemn Italy as a summer residence for consumptive patients, there seems no just reason why we should commend the West Indies, even in winter, the temperature of which is above the summer temperature of any place in the south of Europe. If to this consideration we add the numerous privations, annoyances, and discomforts which are almost inseparable from a residence in the West Indies, I think we might almost be justified in erasing these islands from the list of places suited to the phthisical invalid. Among other contingent disadvantages may be mentioned the difficulty of procuring houses in proper situations, the expenses of living, the annoyance of musquitoes, sandflies, &c. &c.

"If to these objections, founded on an impartial consideration of the nature of the climate and of the disease, we add those of a more conclusive nature, derived from the experience of medical men, I conceive the question of the propriety of sending patients labouring under confirmed consumption to the West Indies, will be set at rest forever.

"In the first place, I may remark, that tubercular phthisis is by no means rare, even among the white inhabitants of the West India islands, while it is of frequent occurrence among the black; and it is not uncommon for individuals affected with this disease to migrate in search of health to a more northern climate.

"These circumstances, however, although properly noticed here, are not adduced as arguments against the propriety of sending consumptive patients to the West Indies; because we find phthisis prevailing, in a greater or less degree, among the natives of every civilized country in the world. But a very different conclusion must be drawn from the fact confirmed to me by numerous medical friends, who have resided in the West Indies—that consumptive cases sent thither proceed much more rapidly to a fatal termination than in temperate climates. And, indeed, this is what we should expect, *a priori*, from considering the nature of the disease, and the well known influence of the summer climate of the south of Europe on its progress. I am not, however, prepared to maintain that cases of consumption do not occasionally present themselves, in which, even in the advanced stages, a temporary residence in the West Indies might not prove useful. But I do venture to affirm, that such instances are of comparatively rare occurrence, and I would scarcely attempt to designate them. If there are any such, they will be found among the more chronic examples of the disease, which occur about the middle period of life, and which are attended with little constitutional excitement. But I advance this merely as a suggestion, founded on what I know of the disease, as occurring in certain constitutions, and the effects of climate upon these, rather than from practical experience of the effects of that of the West Indies. More extended experience, and more accurate observation than has hitherto been applied to pulmonary invalids sent abroad, can alone enable us to speak positively on this point. In the mean time, every thing that we know regarding the nature of consumption, and the influence of a high temperature on it—supported by our practical experience of the effects of the climate now under consideration, bear us out in laying it down as a general rule—that the climate of the West Indies is an improper one for consumptive patients." 24.

In respect to those people who are only predisposed to phthisis, or what is called threatened with that disease, there is some diversity of opinion among resident practitioners in the West Indies. The subject indeed is a difficult one to investigate. Dr. Ferguson is in favour of the climate as a prophylactic; but much will depend on the nature of the individual's constitution, viz. whether it is calculated to bear the heat of a tropical latitude, or likely to sink under the irritating and exhausting effects of heat.

"When the morbid condition of the system, which gives reason to fear the approach of phthisis, depends chiefly upon hereditary predisposition, and occurs in early life, especially in feeble, irritable constitutions, the climate of the West Indies will disagree. When it occurs at a more advanced period of life, and in a constitution free from much disorder of the nervous system, and of the digestive organs, a temporary residence there may prove useful. The revolution effected in the distribution of the circulating fluids and in the secretions, may have the effect of enabling a constitution in which there exists considerable powers, to overcome the tuberculous diathesis." 26.

The inconvenience of the voyage, especially to females, and the want of accommodations and comforts in a foreign and tropical climate, are circumstances which ought also to be well weighed before undertaking such an important step. In fine, we may safely conclude that the cases of consumption in which the climate of the West Indies promises advantage are very few, and their characters scarcely ascertained—if ascertainable; while those in which it produces mischievous effects are numerous, and generally well marked. "Even of persons predisposed to the disease, the proportion can be but small who are likely to be benefitted by the climate." Chronic diseases of the bronchial membrane are those most likely to be ameliorated by residence in the West Indies, especially if the constitution be otherwise tolerably sound. This is the opinion of Dr. M'Arthur, the talented physician of Deal, who resided several years in Antilles. He considers the climate of the West Indies, however, as unfavourable to asthma. In stomach complaints there can be no doubt that a tropical climate, east or west, is injurious. Chronic rheumatism has been supposed, more from theory than observation, to be one of those maladies for which a tropical climate must offer advantages. The authority above mentioned, Dr. M'Arthur, considers the climate of the West Indies as favourable to those cases where the constitution is otherwise sound; "but when the health is deteriorated (and it is seldom otherwise) the powers of the digestive organs weakened, or the disease attended with profuse perspirations, nothing but a return to a cooler climate can save the patient." Nothing, indeed, is a more common cause for invaliding.

In scrofula affecting the external parts of the body, the West India climate has been considered as favourable, especially by Dr. Ferguson.

Of all the West India islands, Barbadoes is probably the best for an invalid, being cultivated throughout, free from marshes, level for exercise, and furnished with many accommodations. The capital, however, (Bridgetown), is not very salutary—the most salubrious part of the island is a place called Scotland, 800 feet above the level of the sea, and forever fanned by the trade winds. It is remarkable that change of air, even from one healthy island to another, has always been observed to be highly beneficial—and this is one cause of the salutary effects of travelling. Kingston, the capital of St. Vincent, has the singular advantage of being built in a salubrious situation on the shores of a fine bay. It is therefore a healthy residence. A cooler station may be found by ascending the mountains; but no accommodations are there to be expected.

The reader will perceive, from this short article, that considerable and valuable additions have been made to this new edition of a work which will become a classical standard of reference on the subject, for the profession in this country.

XI.

RETROSPECTIVE REVIEW.

HAVING cleared our score with the current publications of the day, we shall now try back on our retrospective plan, and present our readers with the analysis of some important works which are unknown to the juniors of the profession and forgotten by too many of the seniors. It is surprising, indeed, how soon even the best productions are buried or swallowed up in the vast torrent of works which issue from the press—so that it is only by recalls like these, that they are preserved from annihilation or oblivion! We are convinced, therefore, that an occasional reminiscence of this kind will be a useful labour—more useful perhaps than a search after what is called novelty.

ESSAYS ON HYPOCHONDRIACAL AND OTHER NERVOUS AFFECTIONS.

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8vo pp. 272.

So close is the connexion of the mind and the body, and such is their mutual influence in action or suffering, that in no possible case of human life, can the one be affected without producing some impression on the feelings of the other. Yet this truth, which has never been denied even by the sternest stoic, or the most subtle metaphysician, has attained universal assent, rather as an article of sensation than of science; as being the compulsion of experience more than the result of enquiry. Some men may call in question the liberty of the human will; and others may weave a fine spun chain of arguments against the existence of matter and the reality of an external world: but after all, whether our thoughts are strung together by necessity, and our movements are impelled by causes over which we have no control; whether the forms that occasion pleasure or pain are substantial or ideal, still the conclusion is the same, as it relates to the sympathy by which the mental and corporeal faculties mutually operate to the ease or disquiet of the entire system. It is, therefore, mortifying to the pride of man's wisdom, that in an age which, above all others, has pushed with the greatest effect the energy of philosophical investigation into the hidden mysteries of Nature, which has traced the minutest essences through a variety of modifications to their elemental principles, with an assiduity that claims applause, and a success that commands admiration; still, after all, and to abate the swell of vanity arising from this consciousness of intellectual superiority, man is made to confess that he knows more of the world around him, than of that which he carries within his own compact form. They who, more than others, are obliged to study the constitution of the human frame, and to extend their inquiries into a vast variety of scientific objects, that they may be qualified to render that study complete and beneficial, even the professors of the noblest art that can engage the time and the talents of man, are in like manner compelled to acknowledge their total inefficiency to account for the aberrations that so frequently disturb the machine with which they are most acquainted. This *crux medicorum* is the more distressing, because while it urges application, it confounds the judgment: and at the same time that it calls for the discovery of a remedy, it baffles hope, in being under the necessity of leaving that to chance which can never be de-

terminated by any certain principle of operation, or be regulated by any rule of practice. Without presuming to advance that the awful malady of Insanity, in all its shades of gradation, can never become so precisely defined as to admit of medical management with a probability of success; we must at least be allowed to say, that hitherto our acquaintance with mental diseases has gone little further than to an observation of general causes and effects, over which professional skill may exert its best efforts in vain. With this impression on our minds, we took up the present volume, in the expectation of seeing much ingenuity wasted in an attempt to remove that opprobrium of medical science, which the subject of insanity has so long proved. We were prepared, indeed, from what we had with pleasure read in the periodical reports of the author, to meet with some acute and lively remarks on extraordinary cases, as also with sagacious counsel in regard to the means employed for the relief of persons affected by nervous disorders. But we had no thought that in a book bearing an unassuming title, and upon an unpromising topic, would be found so many new lights, in the simple form of hints, on the various excitements to mental disease, and upon the injudicious manner in which they are too commonly treated. That the author has been prevented from fulfilling his original intention of publishing a systematical treatise on the subject, is rather a matter of congratulation than otherwise; as, by throwing out his observations in the form of *Essays*, he has rendered his work more likely to become popular and beneficial, by bringing it immediately to the view of those who would be alarmed at the thoughts of perusing any thing like a theoretical or argumentative performance.

The *Essays* are twenty-seven in number; and although they have not the formality of a connected arrangement, yet, as if the maxim of Horace had been under contemplation, the reader will find in his progress, that the order could not have been better disposed, even to constitute a train of leading principles.

The first *Essay* is "On the Influence of the Mind on the Body," in which consciousness, as the peculiar faculty of man, is set forth in strong and elegant language. The following remark, at the close, strikes us as equally new and important.

"The class of persons whose lives are devoted to mere manual labour, especially the more indigent part of them, are, to a certain extent, distinguished by the character of their diseases, as well as that of their other evils. They differ from the higher orders, less perhaps in the actual quantity, than in the glaring and obtrusive colour of their calamities.

"There is no person, perhaps, who is apt to form so low an estimate of the value of human existence, as a medical man practising amongst the poor, especially amongst the poor of a great city. But it is not impossible that he may exaggerate the excess of their sufferings, by combining, as it is natural for him to do, their external state with those feelings which he has acquired from very different circumstances and education. As the horrors of the grave affect only the living, so the miseries of poverty exist principally, perhaps, in the imagination of the affluent. The labour of the poor man relieves him at least from the burden of fashionable ennui, and the constant pressure of physical inconveniences, from the more elegant, but surely not less intolerable distresses of a refined and romantic sensibility. Even those superior intellectual advantages of education, to which the more opulent are almost exclusively admitted, may, in some cases, open only new avenues to sorrow. The mind in proportion as it is expanded, exposes a larger surface to impression."

Essay II. On "The power of Volition," exhibits some curious cases, wherein several persons have been known to "possess power not only over

the feelings and faculties of the mind, but likewise over what are called the involuntary muscles, and even the blood-vessels of the body." But, amusing as this part of the Essay is, what the author has observed on the inhumanity of treating hypochondriacs with ridicule, is better adapted to improve the feelings and to regulate the practice of men.

"No one was ever laughed or scolded out of hypochondriasis. It is scarcely likely that we should elevate a person's spirits by insulting his understanding. The malady of the nerves is in general of too obstinate a nature to yield to a sarcasm or a sneer. It would scarcely be more preposterous to think of dissipating a dropsy of the chest, than a distemper of the mind by the force of ridicule or rebuke. The hypochondriac may feel indeed the edge of satire as keenly as he would that of a sword; but although its point should penetrate his bosom, it would not be likely to let out from it, any portion of that noxious matter by which it is so painfully oppressed. The external expression of his disorder may be checked by the coercive influence of shame or fear; but in doing this, a similar kind of *risque* is incurred as arises from the repelling of a cutaneous eruption, which, although it conceal the outward appearance, seldom fails still more firmly to establish the internal strength, to increase the danger, and to protract the continuance of the disease. By indirect and imperceptible means the attention may, in many instances, be gently and insensibly enticed, but seldom can we with safety attempt to *force* it from any habitual topic of painful contemplation. In endeavouring to tear the mind from a subject to which it has long and closely attached itself, we are almost sure to occasion an irreparable laceration of its structure."

In the third Essay, "On the Fear of Death," the reader will meet with much excellent reasoning, to dispel apprehensions which are, in themselves more tormenting than the object of dread. The author deprecates all tendency to encourage despondency; and among the rest, he shows the fatal effects of predictions of death.

"In dangerous maladies, the person in whom there is the least fear of dying, has, other circumstances being the same, the fairest chance to survive. Men, in critical situations, are apt to be overwhelmed by their terrors; they are drowned by their too eager struggles to emerge; they would keep afloat, if they remained quiescent."

The effects of PRIDE on the mind in producing mental derangement, constitute the subject of the fourth Essay; in which we were much pleased with this judicious discrimination in the mode of treating different persons.

"The humbly nervous ought to be treated with the most encouraging respect, and with the most courtier-like attention. We should endeavour, by expressions of an extraordinary regard for them, to supply the want of satisfaction which they are apt to feel with themselves. On the other hand, a haughty imbecility ought to be met by a management that is calculated to depress the patient in his own eyes, and to sober a spirit that may have been intoxicated by draughts of a servile or treacherous adulation."

The next Essay is on "Remorse," which, beyond doubt, is one of the most dreadful of all diseases when it has become fixed in the mind, and the most difficult to cure. But it should be considered, and the author has prudently laid great stress upon the fact, that remorse is not always occasioned by actual misconduct. It is in truth, perhaps, no less frequently the suffering of a tender and upright mind, than of a guilty conscience. Of this we have in addition to some well known cases, the following; which came under the observation of the author himself.

"It is not very long since I had a professional opportunity of knowing something of the morbid history of a man, who had succeeded to a peerage, and an immense estate, by the

death of an elder brother, with whom he had not been upon good terms for some years previous to that event. The unfortunate heir to the title and domains so severely reproached himself for that suspension of fraternal amity, with regard to which he was altogether innocent, that he sunk into a profound melancholy, from which I have reason to believe nothing has hitherto been able to rouse him.

"I knew another person, who, although his life had been signalized by the most active and successful exertions in behalf of his fellow creatures, was affected with a despondency, the burden of which was, that he had been all along a useless member of society, and that the talents which had been given him had produced nothing in his hands. Under the influence of this imagination, he expressed a kind of horror as well as shame, at the prospect of giving up a stewardship, the duties of which he had, as he thought, so unfaithfully discharged.

"Not many months ago, I had an opportunity of knowing an instance of the melancholy effect of remorse, where the feeling, although not altogether without foundation, was unduly aggravated by an accidental association of occurrences.

"A young lady was one morning requested by her mother to stay at home; notwithstanding which, she was tempted to go out. Upon her return to her domestic roof, she found that the parent, whom she had so recently disobliged, had expired in her absence.—The awful spectacle of her mother's corpse, connected with the filial disobedience which had almost immediately preceded, shook her reason from its seat, and she has ever since continued in a state of mental derangement."

It is well observed, at the commencement of the sixth Essay, that "an hypochondriac should be a hermit in abstinence, but not in solitude." This subject of seclusion from the pleasures of society is ably treated, and the danger of retirement to those who have been accustomed to business is clearly shewn and supported by proofs. Yet a due caution is introduced with regard to the choice of society; for, as it is properly observed,

"We are not perhaps sufficiently aware that nervous complaints are, through the medium of sympathy, scarcely less infectious than ferbrile diseases. Amongst many other instances illustrative of this opinion, I particularly recollect the case of an amiable young woman, who, although she had been before remarkable for the uniform cheerfulness and gaiety of her temper, became decidedly, and often deplorably dejected, in consequence of having for a length of time, been domesticated with an elderly friend who was of a desponding and melancholy cast. The contiguous atmosphere of an hypochondriacal, like that of a typhus patient, may, in a certain sense, be said to be impregnated with contagion."

The seventh essay is "On excessive Study or Application of the Mind," which, though short, contains some excellent advice to literary gluttons.—This Essay is followed by another equally brief, "On Vicissitude as a Cause and Characteristic Symptom of Intellectual Malady." Of the effect of transitions upon the mind, the following instance is given.

"I recollect the case of an unfortunate young man, who became a victim to the disastrous issue of a variety of mercantile adventures. The same blow which deranged his affairs, produced a disorder of his reason. His finances and his faculties fell together. The phantoms of imagination indeed survived, and seemed to hover over the ashes of his understanding. The demon of speculation, which had before misled his mind, now possessed it entirely. His projecting spirit, which was always more than moderately intrepid, took, in the maniacal exultation of his fancy, a still bolder and sublimer flight. Some of his schemes reminded me of another madman that I had heard of, who planned, after draining the Mediterranean, to plant it with apple trees, and establish a cider manufactory on the coast."

The ninth Essay is "On the want of Sleep," as symptomatic and a cause

of mental derangement; in which the author recommends the cold or the warm bath where dietetic opiates have failed.

The next Essay on "Intemperance," contains many valuable cautions with respect to the use and abuse of stimuli; well adapted to make a deep and salutary impression upon the minds of readers in general; but the following is not less deserving the attention of the faculty.

"Inebriety is not properly confined to the use of fermented liquors. The tipplers of laudanum are sots, although of another sort. There is something peculiarly plausible and seducing in this mode of fascinating the sensations. Opium does not in general, as wine is apt to do, raise a tumult of the feelings, or involve the intellect in clouds; but acts more like oil poured upon a tumultuous sea, which tends to allay the agitation of the billows, and induces an agreeable stillness and tranquillity. Instead of lowering man to a level with the beasts, it often invests him, for a time, with the consciousness and at least fancied attributes of a superior being; but he is soon stripped of his shadowy and evanescent prerogative, and is made to suffer all the horrors and humiliation of a fallen angel. The confessions of many a miserable hypochondriac, who has been in the habit of having recourse to opium for relief, justify this representation from the charge of caricature. Grievous as is the depression which takes place, as the second effect of fermented liquors, that which succeeds to the excitement produced by laudanum, is still more intolerable. It is of course a task less difficult to refrain from the former than the latter, when the latter has been for many years regularly applied to for temporary comfort or support, in a desertion or prostration of the spirits. The late Dr. Heberden was of opinion, that it is more easy to relinquish opium than wine, and therefore, in cases which may seem to require either the one or the other, he recommends the former in preference to the latter. My own comparatively contracted experience would incline me, in the same circumstances, to give different advice.

"I have known only one case, in which an inveterate opium-taker has had resolution enough to dispel the charm which had long bound him to its use. This patient was in the custom of employing it in that concentrated form of the drug, which has received the appellation of the black drop. The dreadful sensations which he experienced for a considerable period, after having refrained from his wonted cordial, he was unable to express, any more than the gratitude which he felt towards his physician, for having strenuously and repeatedly, and at length successfully urged him to an abstinence from so delusive and bewitching a poison. When opium is employed as a remedy in cases of merely physical disease, it may not be liable to the same objection; although, even in that class of maladies, it ought to be in general reserved for occasions of urgency or peril. When used for a length of time without any considerable intervals, its bad effects upon the constitution will be found to accumulate, whilst its alleviating influence over troublesome and painful symptoms, becomes almost every day less observable."

From the danger of Intemperance, the author proceeds very appropriately to consider the injury occasioned by "the Excess of Abstinence;" for, as he observes, "we may be intemperately abstemious, as well as intemperately luxurious and indulgent. That degree of privation which is unnatural or unreasonable, proves no less destructive than superfluous and superabundant gratification."

This Essay is followed by one on "Morbid Affections of the Organs of Sense;" in which considerable attention is paid to the organ of vision; illustrated by some remarkable cases in the author's own practice. One of these we shall extract.

"During my attendance upon the Finsbury Dispensary, a remarkable instance of dimness of sight occurred, that had for some time previously been gradually approaching towards blindness, which, indeed, had actually taken place in one of the eyes. The patient

first perceived the dimness the day after she had been frightened by witnessing a violent paroxysm of epilepsy, with which her husband had been attacked the preceding night. Since that time she had herself become, although not in the least so before, extremely liable to fits, and was apt to fall down insensible upon occasions of the slightest degree of agitation or surprise. Her dimness of sight seemed to consist, not in an injured state of the eye, but in a debility of the nervous system in general, that *appeared* more particularly in that delicate and exquisitely irritable part of it which is destined for the purposes of vision. The capacity of seeing with the eye that was not altogether blind, was intermittent, 'going and coming,' to use her own comparison, 'like the sun when a cloud passes over it.' The patient had likewise been subject to a deafness, that might be traced to the same circumstance as gave rise to her ophthalmic malady. Both symptoms had, in all probability, a common origin in nervous weakness or derangement."

In the thirteenth Essay, the opinion, or rather vulgar error, is successfully combated, "that madness, in any of its modifications, arises for the most part from an excess of intellectual vigour."

"That Physical malady may be the occasion of mental disorder," is proved in the next Essay by facts and arguments, while at the same time, the author very properly guards against any leaning towards the doctrine of materialism, which that position might be supposed to favour. We quote from this Essay, with great pleasure, the following reflections on the duty of moderation in scientific pursuits.

"Speculation with regard to the nature of the vital or intelligent principle in man, are involved in so much obscurity, as to allow greater scope for the display of a fertile imagination, than for the sober exercise of the reasoning faculty. The clouds in which this subject is enveloped, the rays of genius may illuminate, but cannot disperse. The unwarrantable boldness and decision with which many are apt to speak upon a question, which, from an incurable deficiency of data, admits of no satisfactory conclusion, argues a more than ordinary imbecility, rather than any superiority of understanding. Genuine intrepidity of every species, is naturally allied to modesty. There is a chaste and sober scepticism. When we profess that there is no moral evidence so immaculately clear, as to preclude all obscuration of doubt, we acknowledge merely the present imperfection and immaturity of our nature. A peremptory positiveness of opinion, as well as a rashness of action, is natural to the ardent and inexperience of youth; but diffidence gradually grows upon declining life. Unlimited dogmatism, in almost every case, affords suspicion of very limited information. In the degree in which our actual knowledge advances, we increase likewise our acquaintance with its comparative deficiency. As the circle of intellectual light expands, it widens proportionably the circumference of apparent darkness."

The Fifteenth Essay contains some good remarks on the polluted atmosphere of the metropolis, from which the author slides gradually into a brief notice of the very old, but not therefore true opinion, "that the gloomy month of November is peculiarly disposing to melancholy, and the favourite season of suicide." This proverbial reproach upon our climate, at that part of the year, is thus dismissed.

"The dark hues of the mind are not in general reflected from the sky; and the preternaturally exalted excitement of mania, soars in general above atmospheric influence. There are cases, indeed, in which the diseased apprehensions of an hypochondriac are relieved or aggravated by the changes of the weather; where, when the sun shines, even his mind seems to be irradiated by its influence, and scarcely a cloud can obscure the face of nature, without at the same time casting a melancholy shade over his speculations."

The Sixteenth Essay on "Dyspeptic and Hepatic Diseases," compre-

hends many valuable rules for regimen, and several hints equally worthy of professional observation and private attention. We were particularly pleased with the following remark, because it exactly conveys our own sentiments, and shews that the zeal of improvement may sometimes, even in the best concerns, be carried beyond the bounds of discretion, and that regulations and institutions, which we may think evil or unnecessary, may be both salutary and advisable.

"The observance of fasts is a wholesome form of superstition. The omission of them in the Protestant calendar, was, perhaps, as it relates to health, an unfortunate result of the reformation. Though no longer regarded by us as religious institutions, it would be desirable that some of them at least should be still kept with a kind of sacred punctuality, as salutary intervals of abstinence, which give to the stomach a periodical holiday, and afford an occasional respite from the daily drudgery of digestion." 142.

This Essay is properly followed by one on "Palsy, Idiocy, Spasmodic and Convulsive Affections;" the perusal of which will yield both instruction and entertainment. Among the cases here neatly reported and yet accurately described, we are particularly struck with one which we shall give in the author's words :

"About two years ago, I met with a remarkable case, which strikingly exemplified the connexion and affinity that may exist between what are called 'bilious affections,' and those which belong more apparently and decidedly to the nervous system. The patient referred to, had, in consequence of a severe domestic privation, been seduced into habits of intemperance, which, for two years, seemed to have no effect but upon the liver, producing at nearly regular intervals of ten days, vomitings of bile, occasionally accompanied by a diarrhoea, which, when combined with the former, of course assimilated the disease to the character of cholera. For the considerable period above-mentioned, his only apparent complaint was what, in popular and fashionable language, is called the 'bile.' After the lapse, however, of somewhat more than two years from the commencement of his intemperate habits, without having received any precautionary or prefatory intimation, he was surprised by a seizure which paralyzed one half of his body, dividing it longitudinally into two equal sections, the one dead to all the purposes of sensation or voluntary motion, the other retaining the functions and privileges of vitality, although in some measure, of course, clogged and impeded by the impotent and diseased half to which it was united. When I saw him last, he had remained three years in this truly melancholy state. At least, during that time, he had experienced no important or permanent amelioration, nor any evident tendency towards the recovery of his corporeal powers. His mind also seemed to have shared in the paralysis. This was more particularly obvious in the lapses of his recollection. His memory had been ruined by the same blow which had disabled one side of his body. His recollection with regard to things, did not seem to be much impaired, but it was surprisingly so with regard to the denominations of persons or places. He has often forgotten the name of an intimate friend, at the very time that, with the most unaffected cordiality, he was shaking hands with him. Upon inquiry, it appeared that the pernicious habits of the patient were still persisted in; a circumstance which alone was sufficient to account for the uninterrupted continuance of this disorder.

"In this case, nothing could be more evident than that the bilious symptoms with which he was first affected, and the nervous complaints which succeeded, both originated from one source: and this may give a hint to those who are much troubled with the *bile*, as it is called, especially when it has been occasioned by the same means as in the instance just stated, that unless they seasonably reform their regimen, they may be at no great distance from a paralytic seizure." 158-162.

Dr. Reid speaks slightly of the Bath waters as a remedy in paralytic cases, nor is he much more favourable to electricity; and, as he very properly observes,

"In the treatment of disease, it must appear desirable to effect the cure, when it is practicable, by means which act generally and impartially upon the body, rather than by those which operate, although not slowly, yet more immediately and with peculiar force, upon the delicate nerves and fibres of the stomach. The health, and of course comfort of man, depend in a principal degree, upon the due vigour of his powers of digestion, which by the inordinate or unnecessary use of drugs, has, in too many instances, been gradually impaired, and at length irrecoverably destroyed. This is apt to be the case, more especially with those fashionable hypochondriacs who are continually having recourse to the doses of pharmacy, in order to relieve the *ennui* of indolence, or to support the languor of an effeminate or enervated constitution. Such an existence as theirs may, out of courtesy, be called life, but it possesses none of life's privileges or its blessings." 176-177.

An ingenious but rather brief Essay on "Hereditary Madness," is the next in succession; and we should have been glad to have seen so excellent a disquisition upon a subject of great importance to society more extended; and our readers, no doubt, will be of the same opinion, after perusing the following remarks on the duty of celibacy in those who are radically of a morbid intellect.

"Nothing can be more obvious, than that one who is aware of a decided bias in his own person towards mental derangement, ought to shun the chance of extending and of perpetuating, without any assignable limit, the ravages of so dreadful a calamity. No rites, however holy, can, under such circumstances, consecrate the conjugal union. In a case like this, marriage itself is a transgression of morality. A man who is so situated, in incurring the risk of becoming a parent, involves himself in a crime, which may not improbably project its lengthened shadow, a shadow too which widens, in proportion as it advances, over the intellect, and the happiness of an indefinite succession of beings. 185-186.

The 19th Essay, on "Old Age," contains some good moral observations on the desire of longevity; but, disposed as we are to admire the penetration and judgment of the author, even in metaphysics, we cannot assent to his assertion, that "an old man is no longer susceptible of new ideas;" and that "his mind lives altogether upon the past." So far, indeed, as this may be said of the general character of climacterics with respect to the study of new arts and languages, we are of the same opinion: but many instances might be adduced of men who have been too much devoted to pleasure or business, to study in the prime of their years, but who have, in the decline of life, attained a competent degree of knowledge, and acquired a relish for inquiry which has been productive of the best consequences.

The Essay on "Lunatic Asylums" cannot fail to be read with avidity at a time like this, when these spectacles have, in an uncommon degree, excited the public attention and parliamentary investigation. This part of the work was written long before the subject had become a matter of general observation, and yet evils which have been developed by authority did not escape his examination, as appears from the following extract:—

"A heavy responsibility presses upon those who preside or officiate in the asylums of lunacy. Little is it known how much injustice is committed, and how much useless and wantonly inflicted misery is endured in those infirmaries for disordered, or rather cemeteries for diseased intellect. Instead of trampling upon, we ought to cherish, and by the most delicate and anxious care, strive to nurse into a clearer and brighter flame the still glimmering embers of a nearly extinguished mind.

"It is by no means the object of these remarks to depreciate the value of institutions which under a judicious and merciful superintendence, might be made essentially conducive to the protection of lunatics themselves, as well as to that of others, who would else be continually exposed to their violence and caprice. But it is to be feared, that many have been condemned to a state of insulation from all rational sympathising intercourse, before the necessity has occurred for so severe a lot. Diseased members have been amputated from the trunk of society, before they have become so incurable or unsound as absolutely to require separation. Many of the dépôts for the captivity of intellectual invalids may be regarded only as nurseries for and manufactories of madness; magazines or reservoirs of lunacy, from which is issued, from time to time, a sufficient supply for perpetuating and extending this formidable disease—a disease which is not to be remedied by stripes or strait-waistcoats, by imprisonment or impoverishment, but by an unwearying tenderness, and by an unceasing and anxious superintendence.

"The grand council of the country ought to be aroused to a critical and inquisitorial scrutiny into the arcana of our medical prisons, into our *slaughter-houses* for the destruction and mutilation of the human mind."

The 21st Essay is "On the importance of counteracting the tendency to Mental Disease;" in which are these remarks upon one of the most important considerations arising out of the subject of insanity, as affecting the medical character in the reliance placed upon its testimony:

"Lucid intervals are a subject deserving of the very particular study of the legal, as well as the medical profession. There are, in fact, few cases of mania, or melancholy, where the light of reason does not now and then shine between the clouds. In fevers of the mind, as well as those of the body, there occur frequent intermissions. But the mere interruption of a disorder is not to be mistaken for its cure, or its ultimate conclusion. Little stress ought to be laid upon those occasional and uncertain disentanglements of intellect, in which the patient is for a time only extricated from the labyrinth of his morbid hallucinations. Madmen may shew, at starts, more sense than ordinary men. There is perhaps as much genius confined, as at large; and he who should court corruscations of talent, might be as likely to meet with them in a receptacle for lunatics, as in almost any other theatre of intellectual exhibition. But the flashes of wit betray too often the ruins of wisdom, and the mind which is conspicuous for the brilliancy, will frequently be found deficient in the steadiness of its lustre."

In the 22d Essay, the author treats of the use and abuse of "Bleeding;" which is admitted to be absolutely necessary in true pleurisy, but censured in strong terms, when indiscriminately resorted to in all cases of palsy and apoplexy.

On the subject of "Pharmacy," which is treated in the next Essay, the author very properly deprecates the practice of prolonging a medicinal course in cases of convalescence from acute disease; and the following observations, by the way of analogy, are equally deserving of the serious consideration of valetudinarians and practitioners.

"In the prescriptions of physicians, as well as in the preparations of cookery, a simplicity ought to be observed, which is in general, perhaps, not sufficiently attended to. A number of different dishes, which, separately taken, might be wholesome and nutritious, must altogether form a compound that cannot fail to have an unfavourable and disturbing effect upon the organs of digestion. In like manner, a glass of Port wine or a glass of Madeira, a draught of ale, or one of porter, might, in a state of debility or fatigue, for a time at least, invigorate and refresh; while if we take a draught, the same in quantity, but composed of all these different liquors, we shall find that, instead of enlivening and refreshing, it will nauseate and oppress. And yet something similar to this daily takes place in the formulae of medical practitioners. A variety of drugs are often combined in the same recipe, each

of which might be good, but the whole of which cannot. A mixture of corroborants or tonics, is not necessarily a tonic or corroborative mixture. A prescription ought seldom, perhaps, to contain more than one active and efficient ingredient; we should thus give that ingredient fair play, and by a competent repetition of trials might be able to ascertain, with tolerable correctness, its kind and degree of influence upon the constitution: whereas, out of a confused and heterogeneous mass, it is impossible for us to discriminate the individual operation of any one of the articles which compose it." 228-230.

In the 24th Essay, "Ablution" is considered in a similar manner with a decisive approbation of the use of cold water, as the means of preserving health, and of restoring it in particular diseases. But at the same time, the idea of superior advantages to be derived from sea-bathing is ridiculed with effect.

"Bodily exercise" is strongly recommended in the 25th Essay; in which, among many other acute remarks, we were particularly struck with the following:

"Improvements in the mechanism of modern carriages, by which they are made to convey a person from place to place, almost without giving him a sense of motion, may be one of the circumstances that have contributed to the increased prevalence of those maladies which originate in a great degree from a fashionable indulgence in lassitude and languor."

The next Essay has for its title, "Real Evils, a Remedy for those of the Imagination;" and, with the relation of some curious cases, it exhibits observations which may be considered as judicious hints for practice.

The last Essay in the volume is on the advantages arising from "Occupation;" the necessity of which is enforced by solid reasoning apt illustration, and a singular case, with which we shall conclude our extracts, already sufficiently numerous.

"I was once consulted by a hypochondriacal patient, who had been the greatest part of his life a journeyman taylor, but who, by an unexpected accident, became unhappily rich, and consequently no longer dependent for his bread upon drudgery and confinement. He accordingly descended from his board; but Charles the Fifth, after having voluntarily descended from his throne, could not have regretted more severely the injudicious renunciation of his empire. This man, after having thrown himself out of employment, fell ill of the tedium of idleness. He discovered, that having nothing to do, was more uncongenial to his constitution, even than the constrained attitude, and the close and heated atmosphere in which he had been accustomed to carry on his daily operations. In one respect, however, the repentant mechanic was less unfortunate than the imperial penitent. It remained in the power of the former to reinstate himself in his former situation; which, after having resumed it, no motive could, a second time, induce him to relinquish." 260-262.

After so copious a view and minute an analysis of the present volume, any thing farther that we could say concerning it must be needless; the reader will see by the subjects treated, that the work is one of universal interest, because there is no human being, capable of thinking, who has not his seasons of mental depression or excessive irritation, who is not either called upon to watch over his own infirmities, or to commiserate those of others. In the extensive range of moral and actual ills, there is not one that is so frequently obtruded upon our feelings as nervous sensibility; and, therefore a more benevolent office can hardly be undertaken, than that of pointing out the varieties of this Protean malady, and the causes which tend to its ascendancy over the body and mind, till the grave closes upon the one, or reason is extinguished in the other.

XII.

REMARKS ON NERVOUS AND MENTAL DISORDER, WITH ESPECIAL REFERENCE TO THE RECENT INVESTIGATIONS ON THE SUBJECT OF INSANITY. By *David Uwins*, M.D. Octavo, sewed, pp. 41.

FROM a slight collision which lately took place between Dr. Uwins and us, entirely provoked by himself, the worthy Doctor will no doubt consider us as his decided enemies. We do not expect to convince him to the contrary. We had no idea, at the time of the collision, that the author of the pamphlet abovementioned, was a "MAD DOCTOR;" but we now find that Dr. Uwins has been the medical superintendant of a receptacle for weak intellects, called "THE PECKHAM ESTABLISHMENT," for some years past. It is well known that the insane always take most inveterate antipathies to their dearest friends; and therefore it is probable that the atmosphere of a lunatic asylum, has infected the worthy Doctor with a prepossession against men who never injured, but always befriended him. In our last number we have endeavoured to show that all men are mad, upon some one point—and, on this principle, we should have no qualms of conscience in consigning Dr. Uwins to his own asylum, till he had abjured the monomania of EGOTISM. After the gentle hints which we gave Dr. Uwins respecting Gifford and the Quarterly Review, we expected that common prudence would have induced him to be silent on that subject for a short time; but no:—The article on insanity in the Quarterly is uppermost again, and one would suppose that the venerable Doctor had surpassed his century, and could only remember one idea that had engrossed his intellect in early life! Yet the Doctor is in the prime of life, and has no excuse for this everlasting tale being foisted on his readers (or rather his *reviewers*) *usque ad nauseam*. While Dr. Uwins takes great care to apprize us of his early predilection for the study of mental pathology—"a subject especially to his taste"—and his appointment to "Peckham Establishment," he declaims in good set terms against MAD DOCTORS.

"Mad, my friends, I may be; of that it is for you to judge, in the plenitude of your Metaphysico-medico legal knowledge; but 'mad doctor' I am not. Nay, with all the feeling just expressed in favour of one particular department of medical investigation and scrutiny, I have ever been averse from the principle and practice of separating insanity, strictly so called, if indeed it can be strictly so called, from other maladies which are allied to it in nature, and differ from it only in degree. In another part of this essay I shall have to state my objection to this division more at large, and *ad rem*; suffice it for the present to intimate that to take madness under medical cognizance, specifically and separately, and exclusively, appears to me inconsistent with that connexion and totality in which every thing connected with the sentient system ought to be received; because such partial and excluding notions insensibly lead the mind too much into that kind of favoritism, if the expression be allowed me, which cramps the mental energies, and gives rise to that jealous feeling on the part of the public, which, as we have seen in a recent instance of notoriety, is easily fomented from a spark to a flame, by the ingenuity and ability of men who, in the exercise of their professional functions care little what sacrifice they make of truth, or who shall be the sufferer, so that the battle be won, to the successful issue of which their earnest endeavours are directed." 6.

Dr. Uwins considers it inconsistent with the nature and objects of medi-

cal science or *art*, "to divide and subdivide any part of it in the manner proposed and practised by *some persons*."

"These divisions and separations, instead of insuring 'greatness' (according to vulgar conception and phraseology) in this or that particular, is calculated to operate the very opposite effect, viz. that of producing a *littleness and narrowness* of character; for, bating the *tact which large experience cannot fail of giving*, when reputation shall run high on this or that point, (and even this tact itself may become too mechanical, and partake, therefore, too much of empirical routine,) the wisest and most efficient physician will be the man who surveys the large subject of physiological and pathological enquiry as one connected and comprehensive whole; who rejects the notion of '*caste*,' and smiles at the popular creed of this man being great in consumption, that man being '*fine*, in children's complaints; of one being an adept in female diseases, of another being a good '*mad doctor*.' I hope the immediate succession of those two last items will be set down by my fair readers as purely accidental." S.

From the last part of the quotation, it is evident that Dr. Uwins expects the perusal as well as the patronage of the fair sex for his lucubrations; but we suspect that the "march of intellect" has sent most of his fair readers many a day's journey before him on the subjects which he discusses—and that all his *contemporary* ladies of a "certain age," have had their taste for literary composition, of the UWINIAN character, most terribly vitiated of late years.

Our readers will see, in the quotation which we have inserted, that Dr. Uwins speaks of the "littleness and narrowness" which the study of particular diseases gives to the medical character—while apparently admitting, "the tact which large experience cannot fail of giving, when reputation shall run high on this or that point." There is some inconsistency even in this position; but surely there is still more inconsistency in the following observation.

"I say, that he who is really and scientifically and radically agile in one department of the healing art, must be so in all, and that the idea of a concentrated power over one class of maladies occasioning a defective judgement in others, is quite as ideal in conceit, as that of the fabulous inventors of antiquity, who put the head of a man on the shoulders of a horse." S.

Suppose a man had studied thoroughly all branches of his profession, but that accident had directed his attention more particularly to one—say lithotomy or lithotritry; and that reputation had given him immense experience in the favourite pursuit:—are we thence to infer that this "scientifically and radically agile operator must be equally agile and clever in all other departments? Baron Hourteloup and Mr. Costello have had excellent and general educations; but who would conclude that these expert operators on the stone must be equally clever in all other departments of medical science? Our worthy *confrere* and ex-warden, Mr. WAKLEY,* is one of the most expert *phlebotomists* of the age; yet a tolerable acquaintance with "*MODERN BABYLON*," has not enabled us to discover a single instance in which his radical admirers have called him to prescribe for *themselves*. Many there be who recommend him as a plebotomist for their *neighbours*—but the dence a one have we ever seen who confided his own precious carcase to the care of the radical reformer!! This shews that a man may be clever in one thing, though not in all.

* Mr. W. has retired from the heavy duties of the church-wardency of St. Giles's, with the title of "EX-WARDEN of the SINK PORTS."

We congratulate the worthy author on his connexion with a lunatic asylum where "his original bias towards inquiry into the intricacies of nerve and mind became still more confirmed in the exercise of his appointed duties." The following passage will shew that Dr. Uwins has not been two or three years at the "PECKHAM ESTABLISHMENT," without making some important discoveries.

"Strange as the confession will seem to some, the division between madness and mere nervousness, which I had originally conceived to be drawn out with more than just precision, lost more and more of distinctness; madness, I have repeatedly said to myself, is an arbitrary, an odious term, and the more and further we recede from the ancient notion of attaching peculiarity to the malady, the more we cease to look upon the subjects of mental disorder as *εμψορῆτοι*, or stamped as with the mark of Cain on their forehead, the more shall we succeed in reconciling the public to our curative attempts, and the less propriety will be perceived in setting apart a class of men for the management of madness, to whom a species of peculiar power is awarded by the selection, which neither does nor ought to exist." 11.

There is refinement for you! We are to have no more *lunatic* asylums; but only *nervous* establishments:—no more strait-waistcoats:—the ladies, whose nerves are rather tumultuous, are to be controlled by golden chains, like Zenobia with fetters of gold in the triumphal procession of Aurelian.—Even the mad doctors themselves must change their designations to the more scientific terms of *NEUROLOGISTS*!

It appears that Dr. Uwins was preparing a large work on Insanity—we beg pardon, on "Nervous and Mental Aberration," when certain "unforward events" put to flight the train of his meditations, like the stone thrown into the tranquil lake which upset the harmony of the picture reflected on its glassy bosom.

"Banks, trees, and skies, in thick disorder run!"

"I say I became intent upon publishing a work which should not be discreditable to myself, nor without its use to the profession and the public. And on this ground I was intending to proceed quietly and slowly, when lo! circumstances occur—investigations take place—the public mind becomes agitated—respectable practitioners are hurled from popular confidence and promised wealth into contumely and poverty—the credit of the medical profession itself becomes shaken, and those members of it who have it especially in their power, from their official situation, to assert its dignity, and maintain its right, in reference to the points in debate, seem especially to be summoned from a state of supineness to be up and active.

"———Potes hoc sub casu ducere somnos?

"Nec, quæ te circum stent deinde pericula cernis?" 13.

It is certainly very laudable in Dr. Uwins, in his official capacity, to come forward and support the dignity of the profession; but how far the present brochure, which is evidently intended for general readers, is calculated to raise the literary, scientific, and philosophical character of our brethren in the eyes of the world at large, we will not venture to determine.

Dr. U. informs the public that the first patient he confined in "Peckham Asylum," was *not* mad. There is a great advantage in making a favourable impression on our readers at the beginning—and this ingenuous confession of our author cannot fail to effect that purpose. Candour is often more prepossessing than judgment—and the force of truth is irresistible:—*omnia vincit veritas*. Determined not to be swept away by "the broom of forensic authority," Dr. Uwins attacks his legal opponents with the arms of poetry.

and quotes from a volume "written by one Shakespeare," the pithy sentiment respecting "the native hue of resolution being sicklied over with the pale cast of thought," although we confess that we can see no more connexion between this passage and the diagnosis of insanity, than between "the cloud-capt towers, the gorgeous palaces, or the solemn temples" of ancient Rome and the Kitchen chimney of Peckham Asylum.

GIL BLAS is next pressed into the service of our author, as illustrating the philosophy of mental derangement; and the circumstance of an eloquent prelate preaching stupid nonsense after an attack of apoplexy, is adduced as proof that insanity depends on corporeal disease. But if the preaching or writing of stupid stuff be proof of either mental derangement or corporeal disease, the Lord help us! Many of us must soon take up our abode with Dr. Uwins in the "PECKHAM ESTABLISHMENT!" The following passage would justify any two physicians to *lock up* Dr. U. himself within the walls of his own asylum—if we were to act upon *his* principles.

"Tho *when* and the *where*, and the manner of disjoining the deranged from the social circle, and the degree of injury the mind has sustained, or is likely to feel, from the various modes in which the nervous organization is called upon to encounter disorder, constitute, indeed, the main particulars upon which medical judgment is to be exercised when summoned to determine on questions relative to mental derangement." 22.

We can form some idea of a circle being *deranged*. It may be changed into the form of an oval, a square, a parallelogram, a triangle, &c. but how we are to disjoin a *deranged* from a *social* circle, is not quite so comprehensible. Neither do we understand how the "nervous organization is called upon" to encounter certain vicissitudes of fortune—nor who the *appellants* are in such cases. Perhaps Dr. Uwins himself can enlighten us on this point.

"He recovered, however, from it so far as to be able to compose and deliver homilies; but lo! these productions, instead of being now marked by the features of legitimate and impressive eloquence, are *turgid, and bombastical, and inane*; while the preacher still imagines them *beautiful and good*." 21.

So we fear Dr. Uwins will find his present homilies. If they make any impression at all on the general public, they will make an impression extremely unfavourable to the republic of medicine. If non-professional readers judge of our intellectual endowments by these pompous inanities, and puerile, or rather anile egotisms, the medical profession will soon be at a low ebb! But we hope for the better. We know that the SCHOOL-MASTER is at work; and that the rising generation of the profession is receiving an education, general and medical, which will correct these injurious effusions of imbecility—or neutralize their effects.

Dr. Uwins will not take the advice which we proffer—namely to *write no more*. The article in the "QUARTERLY," which he considered as the brightest effusion of his genius, and the star which was to light him on to "perpetuity of fame," has proved an ignis fatuus that has led him into numerous failures. As an author and as an editor, he has been eminently unsuccessful. As a physician, as a gentleman, in all the relations of private life, we do not believe a more worthy man exists. As a *practitioner* in medicine he has our highest respect—as a *writer*, we are not singular in estimating him as peculiarly deficient in talent—maugre the judgment of the late Mr. Gifford.

XIII.

RETROSPECTIVE REVIEW.

CRIMINAL ABORTION.*

*Sed jacet aurato vix ulla puerpera lecto,
Tantum artes hujus, tantum medicamina possunt,
Quæ steriles facit, atque homines in ventre necandos
Conducit.* JUVENAL.

*Vestra quid effoditis subjectis viscera telis,
Et nondum natis dura venena datis ?
Quæ prima instituit teneros convellere foetus
Maliâ fuerat digna perire suâ.
Hoc neque in Armeniis tigres fecere latebris,
Perdere nec foetus ausa leana suos,
At teneræ faciunt, sed non impiorum puellæ,
Sæpè suos quæ utero necat, ipsa perit.* OVID.

Definition of the crime. The employment of any means intended to destroy the fœtus *in utero*, or to procure its expulsion previously to the period at which it is capable of existing, independent of its connexions with the mother, constitutes the crime of provoked abortion. This definition obviously excludes the abortion consequent on the employment of medicine, or infliction of violence, taken or incurred without criminal design against the offspring.

Abortion may be involuntary, as induced by the operation of natural causes, or premeditated and determined by external violence. It is the province of the juridical physician, to decide whether, in any suspected case, the event has taken place accidentally, or been the consequence of criminal proceeding; whether, and by what means, the fœtus has been prematurely expelled; and, lastly, whether, at the period of employment of such means, the fœtus were endued with life.

But previously to our entering upon an exposition of the general principles by which the solution of these important queries may be directed, it may be right to consider the causes by which abortion, spontaneous or voluntary, is commonly produced, and the external and internal signs from which its occurrence may be very confidently inferred.

Spontaneous or involuntary abortion may arise from causes operating directly either on the mother, or the fœtus and its appendages. Under the first class of causes may be enumerated peculiarity of constitution; moral affections, particularly grief† and the other depressing passions, surprise, terror, sympathy, sometimes excited by the view of another woman in labour; agents which exert a physical operation, as undue plethora, weak-

* Dict. des Sciences Medicales, &c.

† This will be particularly liable to operate on an unfortunate female about to give birth to an illegitimate child, and whose mind is keenly alive to the shame and wretchedness of her situation. EDIT.

ness, and irritability; inordinate exertion of any kind, excessive evacuations, intemperance, acute and violent diseases, especially those of the uterus or organs composing the generative and urinary systems, or mechanical injury. Maladies of the fœtus or a morbid condition of the funis, the membranes, or placenta, belong to the second class.

The means by which artificial or voluntary abortion may be determined are either constitutional, as exciting a general disturbance in the economy; or local, and exerting a mechanical operation. The first are by far the least certain in their effects. They consist principally of blood-letting, evacuations from the mouth and rectum, diuretics and emmenagogues. We shall cursorily consider these different agents, and the rank which they respectively hold in the catalogue of abortives.

Blood-letting. *Mulier, in utero ferens, sectâ venâ abortit*, is one of the aphorisms of the venerable Hippocrates: and a similar opinion generally prevails among the people. But abstraction of blood, although when largely employed in a weak, delicate, and irritable female, or otherwise injudiciously resorted to, may operate in provoking abortion; under other circumstances, and especially in plethoric subjects, is often successfully prescribed to obviate the impending danger. Copious bleeding from the foot in the earlier stages of pregnancy is commonly considered more likely to induce disastrous consequences than the same operation performed in the arm, and at a more advanced period of utero-gestation.

Emetics and purgatives. These act either by the general commotion which they excite in the system, or the irritation produced by them in the intestinal canal, and hence propagated to the hypogastric organs. Yet a vomit or aperient, seasonably administered, may remove intestinal disorder, which, otherwise, might have eventually determined abortion. When gastric or alvine evacuants are administered with this view, those of the mildest operation should be selected, and great precaution exercised in their employment.* They, on the contrary, who use such remedies with criminal intention, most commonly choose such as are distinguished by the violence of their action; and take, or administer them in immoderate doses, independently of all necessity or indication.

Diuretics and Emmenagogues. Various medicinal substances, which act directly on the urinary organs, are regarded as capable of provoking the menstrual flux, and consequently abortion. But it may be doubted, whether any diuretic or emmenagogue, with the exception of the *lytta*, really possesses any such baneful property. Preparations of savin, and the terebinthinate, have often been very largely administered without inducing these consequences. Electricity, when applied in considerable force, may, particularly in subjects otherwise predisposed to abortion, excite a disturbance in the uterine system, destructive to the healthy performance of its gestatory functions. This will belong to the class of constitutional or local means, according to the mode of its application.

* We have seen premature delivery brought on by a very moderate dose of calomel and rhubarb: and abortion, by employment of diuretics, particularly the *lytta*. Hence medical men should be very cautious in administering these substances to pregnant females.—Edit.

Infliction of blows upon the abdominal or lumbar regions, or other external violence, and the introduction of sharp instruments from the vagina into the uterus, whereby the membranes of the ovum are ruptured, constitute the local and mechanical means usually employed to procure abortion. The former acts by inducing detachment of the placenta, hæmorrhage from the uterine vessels, and the death of the fœtus. But the latter mean is the most certain in its effects, and repugnant as it may seem to every feeling of the human heart, most commonly employed. As this dreadful crime, however, is usually perpetrated by an ignorant and inexperienced operator, the body of the fœtus, or generative organs of the mother, must often exhibit such marks of violence as will lead to its detection, and the punishment of the wretch by whom not only the child, but sometimes its ill-fated mother also, has been remorselessly sacrificed.*

The signs denoting that abortion has taken place, are external and internal; respectively appreciable by common examination and anatomical inspection. *External.* These may be distinguished as occurring either anteriorly or subsequently, to the period of abortion. The anterior signs are cessation of the menstrual flux, depraved appetite, vomiting, protuberant abdomen, and all the other phenomena which denote pregnancy: the subsequent, commonly, are the following: issue of a watery or bloody kind of milk from the mammæ; (when the woman survives the process;) sudden subsidence and diminution of these glands; areolæ of the nipples, unusually large and dark; discharge of an ichorous blood from the vagina, sometimes mixed with coagula and mucus; labia soft, red, and swollen; vagina excessively dilated; os uteri gaping, flattened, and inclining downwards; abdominal integuments wrinkled and flaccid; sometimes a disagreeable smell. The woman, moreover, feels pains about the uterine region, shivering and tremors in the extremities, and lassitude. She evinces a frequent wish to lie down, and totters in her walk. The legs sometimes swell; the superficial veins disappear; and the external parts are discoloured. In addition, it should be remembered, that the hæmorrhage which succeeds abortion or delivery, is more profuse and of longer duration than the menstrual discharge; and that, unlike the latter in its healthy state, the hæmorrhage produces great languor and exhaustion, and forms coagula, rarely or never seen in the menstrual blood. These signs, when presenting themselves in combination, assume a very decisive character; but isolately observed, their evidence must be little relied on, as most of them may be consequent upon the various other diseases to which the human female is subject. *Internal signs.* These, when the death of the mother admits of the necessary examination, are unusual capacity of the uterus, and thickness of its parietes; traces of adhesion of the placenta to the uneven internal surface of the organ; relaxation of the cervix; dilatation of the vagina; considerable diminution of the ligamenta lata; and an appearance, in the ovaries, of the cicatrix of a *corpus luteum*. But it has been contended by some gentlemen, whose arguments are perhaps more ingenious than solid, that, in any sus-

* See *The remarkable Trial of William Pizzy and Mary Codd, &c.* 8vo. Ipswich, 1808: or a very able Review of it in the sixth volume of the *Edinburgh Medical and Surgical Journal*. Edit.

pected case "the distention of the uterus might arise from hydatids or moles, and the inequality of its internal surface (be) occasioned by their attachment."* And, again, it is asserted by practitioners of high authority that traces of *corpora lutea* sometimes exist in virgins, and in salacious women who have never been impregnated. All these phenomena, it should be recollected, external and internal, will be observed, whether the abortion or premature delivery have been spontaneous, or violently and voluntarily provoked; and will be more strongly marked in proportion as the work of utero-gestation draws nearer to its close. Indeed, during its earlier stages, the traces of them are with difficulty recognizable; as the hæmorrhagè, under these circumstances, is rarely profuse, and the uterus and abdomen but little distended. However distinctly visible they may have at first been, these signs commonly disappear in about ten days after the event with which they are connected has taken place.

We have before mentioned, that all these signs, taken isolately, may be fallacious, and that they only derive solidity from combination and perfect coincidence. Some objections to implicit reliance upon the results of anatomical examination have been already stated. It may be right to consider farther the identity of some of these signs with the phenomena of other and very different diseases.

In the first place, *the wrinkling and flaccidity of the abdominal integuments* may be the consequence of peritonæal dropsy, of long continued tympanitis, of tumours seated in the hypogastric or umbilical regions, or of other causes totally unconnected with abortion.

Secondly. *Secretion of milk* may arise from mere suppression of the menstrual discharge; but the fluid, in this case, will be more watery, and the mammæ less pendulous and flaccid, than after abortion.

Thirdly. All the symptoms of pregnancy may result from an imperforate state of the hymen, and consequent retention and accumulation of the menstrual blood; and all the external phenomena, characterizing abortion, from rupture of the membrane and evacuation of the retained fluid.

Fourthly. Nothing can be more uncertain than the inferences drawn from the *condition of the uterine orifice*. In some young women, the size of this orifice is naturally as large as in women who have been recently delivered: or the alterations which it exhibits may depend on some organic lesion, or other cause very different from parturition. On the other hand, it must be allowed that, in persons who are pregnant for the first time and have suffered abortion at an *early* period of utero-gestation, the wrinkling and flaccidity of the skin of the abdomen does not take place;—that, in

* See "*The Trial of Charles Angus Esq. for the Murder of Margaret Burns.*" 8 vo. Liverpool, 1808; and the two pamphlets therewith connected. A very full account of them is given in the fifth volume of the *Edinburgh Med. and Surg. Journal*. The writer of that article very judiciously remarks, that, "in cases of doubtful parturition, the proofs are rather to be expected in the appendages of the uterus, in the ovaries, Fallopian tubes, vagina, and areola of the nipples, than in the uterus itself. The appearances in the uterus may be the effect of disease; but such disease never produces those changes in other parts, which are the constant concomitants of pregnancy." See also *Dr. Male's Epitome of Forensic Medicine*, page 120.

some females, especially those who have been nurses, the mammæ very tardily display the changes operated by gestation ;* that the destruction of the fœtus *in utero* may be accomplished without the ordinary symptoms of abortion being developed, as when, the membranes having been penetrated, and yet the placenta not detached, the fœtus perishes, and its membranes, shrinking, separate gradually from the internal surface of the womb without producing hæmorrhage ; and, lastly, that the uterine orifice sometimes preserves after delivery its previous regularity of figure, or even exhibits an additional degree of straitness and constriction.

Abortion, we shall observe in concluding this part of our subject, does not always immediately succeed the infliction of the violence by which it has been determined. Sometimes the causes by which the placenta is detached, do not suffice to expel the fœtus and secundines from the cavity of the uterus. Hæmorrhage necessarily ensues ; but the constriction of the cervix uteri, while it allows the issue of the blood, prevents the escape of the solid and voluminous ovum. Thus the unadhering fœtus may be retained in the womb until the hæmorrhage has completely ceased, and that enfeebled organ re-acquired its power of contraction ; and, although detached by violent means, be at last expelled without any attendant hæmorrhage. To discover the truth, under such circumstances, when there is reason to suspect provoked abortion, we must have recourse to the anterior signs, and to those which succeed the hæmorrhage. If it have been but a simple loss of blood, the health of the woman will be re-established in its cessation. The detached ovum, on the contrary, acting as a foreign body, will prove a constant source of irritation to the uterus, until expelled from its cavity.—The subsidence of the abdomen, the softness and flaccidity of the mammæ, the fainting without apparent cause and transient shiverings, experienced by the woman, and discharge of black fœtid substances from the vagina, indicate sufficiently the presence of a detached and putrescent body within : and this indication will be eventually confirmed by the evacuation of the putrid mass from which the train of symptoms has originated.

We now proceed to examine the queries proposed in the commencement of this article, and to indicate the points, by attention to which their solution will be best undertaken and most effectually accomplished. In so doing, we shall deviate some little from our former arrangement.

First. *Has the fœtus been prematurely expelled, or, in other words, has abortion, or premature delivery, taken place?* To decide this question, it is absolutely requisite that the expelled substance be submitted to examination ; for this constitutes the *corpus delicti* ; in the absence of which all judicial proceedings fall to the ground ; even although the woman suspected should avow her pregnancy, and evident traces of recent parturition be discovered upon her. This examination will prove more difficult and uncertain in proportion as pregnancy is less advanced. In fact, as Fodere very judiciously observes, juridical researches on abortion can scarcely be exercised before the close of the second month of utero-gestation, both because

* Fodé é has observed the mammæ of pregnant women "perfectly flaccid," between the fourth and fifth months. See his *Traité de Médecine Légale*. Tome iv.

women, at first uncertain with respect to their situation, rarely attempt to procure abortion before this period; and till then it is very difficult to collect an assemblage of signs sufficiently well-marked, in proof of its occurrence.*

We deem it needless to trace with all the minuteness and prolixity of description of the continental writers, the progressive developement of the various parts and organs of the human fœtus from the moment at which its slender rudiments first become visible to its entry upon a new and independent state of existence. It will be sufficient for our purpose to state that, observed between the fourth and sixth weeks from conception, the fœtus appears to be about the size of a wasp. The head forms then more than half its bulk; the eyes and mouth are well-marked; the hands and feet seem to be immediately attached to the trunk; the arms, legs, and thighs are scarcely visible. The containing ovum, about the seventh week, equals in volume a large hen's-egg. This ovum (independently of the double decidua by which it is invested as the head by a double night-cap) consists of two membranes; the external, names chorion, of a spongy structure and furnished outwardly with a very thick down; and the internal or amnios, thin, transparent, and displaying amid the limpid water which it contains, the body of fœtus. These membranes adhere less intimately together at the commencement of pregnancy, than the chorion to the uterus. Hence, we sometimes see them disunited in early abortion and separately discharged. The chorion then frequently lodges on the orifice of the womb; and the amnios, inclosing the water and fœtus, comes away entire; while some time elapses ere the former is expelled. In this case the woman voids a kind of membranous ovum, which has not the least appearance of flocculi; and the chorion, when afterwards discharged, unless it be attentively examined, may be mistaken for a coagulum of blood, inasmuch as it is covered by a layer of this fluid.† From this period, the numerous and intimate connexions of the chorion with the internal surface of the womb; the decided formation of the placenta; and the close relations of the fœtus with its membranes by means of the umbilical cord, render the traces of abortion, and the presence of the expelled ovum amid the accompanying coagula of blood, much less difficult of detection. In fact, the flocculi which have been described as projecting from the external surface of the chorion, soon become a thick, bloody mass, intimately attached to the uterus, and embracing the ovum in the greater part of its extent. If this mass be examined in a state of detachment from the uterus, we readily observe the bloody portion, more extensive in an inverse ratio to the term of pregnancy, embracing a vesicle that contains the fluid in which the embryo floats, not exactly at the centre, but towards one of the extremities of the mass.‡

The following constitute the chief external signs by which the prematurely delivered may be distinguished from the mature fœtus.

First. The body of the former is emaciated and dry; the skin, flaccid and loose, is nearly or altogether destitute of adipose substance: the blood, seen through the cutis, gives it a red or even purple colour, especially where

* Foderé. Work before cited. † Baudeloque. *L'art des Accouchemens.*
‡ Foderé. Work before quoted.

it is more delicately organized, as in the palms of the hands and soles of the feet. *Secondly.* The small hairs which cover the skin of the mature fœtus, are scarcely visible: the sebaceous matter of the surface is less adherent, and resembles a flocculent down, which occupies particularly the lateral parts of the face, the back, loins, and shoulders. *Thirdly.* The fontanelles are generally very large and the cranial bones mobile; but to the first of these characters there exist some exceptions. *Fourthly.* The face is little developed, and exhibits an aged, unpleasing, sorrowful appearance; the lips and ears are purple; the tongue very red. *Fifthly.* The hair is thin, short, white or silvery; the nails scarcely apparent or totally wanting. *Sixthly.* The eye-lashes and eye-brows are scanty; the lids adhering together; the pupils covered by a membrane. *Lastly.* The scrotum is purple, much wrinkled, and commonly without the testes: the labia pudendi, in the female are swollen; the nipples not larger than a pin's-head, and destitute of the wonted areola.*

The dimensions and weight of the fœtus are too variable to admit of precise specification. In general, the full-grown child weighs from seven to upwards of eight pounds; and measures, in length, from nineteen to twenty-two inches.

These data it will be right to bear in mind; but they are applicable only in combination with all the other signs. In proportion as utero-gestation is less advanced, and as a longer space of time has elapsed from the expulsion of the fœtus, the difficulties and uncertainty of the examination of the woman must necessarily be increased. On these occasions, it is very necessary to inspect the linen of the accused; and the appearance of blood and coagula thereon will fully justify prosecution of the research. The assertion, often brought forward by women, that such appearances have been caused by a copious return of the suppressed menstrual flux, although sometimes correct, should never be implicitly received by the juridical physician, or considered as rendering unnecessary a further investigation.

Moles, or unorganized masses, inducing all the usual phenomena of pregnancy and parturition, are sometimes discharged from the uterus; but in these, the bloody portion, which the human ovum exhibits externally, is commonly found interiorly placed, and enveloped in a strong false membrane, the production of the albuminous part of the blood. This may generally be regarded as a consequence of impregnation; and when occurring in an unmarried female, might tarnish her character, or even implicate her in horrible suspicions of secret delivery and infanticide, although it would not endanger her life: for the English law requires, that "the body of the child be found before the coroner can hold an inquest." In such cases, a mark, resembling that of the placental attachment, would be seen on examination of the uterus. The very age of a person, in whom a flooding, which assumes the characters of abortion, may have taken place, will sometimes suffice to remove every rational suspicion of such an event.†

II. *Supposing the fact of abortion to be proved, has it been spontaneous, or voluntarily or criminally provoked?* In solving this momentous question,

* Marc. *Dictionnaire des Sciences Médicales.*

† See Male and Foderé. *Works before quoted.*

the confrontation of the moral circumstances with the physical effects of the action, can alone lead to a kind of certainty; and, although such research falls rather within the province of the jury than the physician, it nevertheless, constitutes the only mean whereby he is enabled to dissipate the obscurity which envelopes the subject. The truth of this principle will be demonstrated by examination of the following points. They consist in determining whether the suspected female have suffered any fall, or other injury, followed by abdominal commotion; whether the abdomen present any bruise; or the fœtus any brown or livid spots; whether the injury were directly or shortly succeeded by hæmorrhage or other sign of disorder; whether the woman were of a temperament so irritable as to favour the operation of such violence; whether she have carried any burden, or made other effort injurious to the state of pregnancy, and at what period of this state, and what distance of time from the expulsion; whether there exist any internal cause capable of producing hæmorrhage, and whether it and the abortion have been preceded by a decidedly plethoric condition, or inordinate corporeal exercise; whether the woman have unduly compressed the abdomen with stays or ligatures, or, with a view of re-exciting the menstrual flux, have employed medicinal remedies; at what time the hæmorrhage began, its duration and probable amount; and, lastly, whether the woman exhibit any irregularity or morbid condition?

The affirmative of a majority of these queries would exclude all idea of provoked abortion; which, on the contrary, would be sanctioned by concurrence of the following circumstances:—Has the woman, in question, concealed her pregnancy? Has she sought information on the various means of procuring abortion; or used, without necessity, violent and dangerous exercise? While in the enjoyment of good health, has she been busied with preparations and arrangements indicating an expectation of illness? Has she repeatedly, and in a private manner, requested different surgeons to bleed her, particularly in the foot, without informing them of her having frequently been bled before; or, has she sought to obtain from any medical practitioner, or other person, articles proper for provoking hæmorrhage? Has she elsewhere procured this kind of drugs, or employed compounds of them prepared by herself? Has she, needlessly and without the prescription of a medical adviser, taken drastic purgatives; or have the remains of suspected drugs been found in her possession? Has she suddenly affected illness in order to conceal her state, and especially the uterine hæmorrhage subsequently discovered. Do there, lastly, exist on the generative organs of the mother, or body of the fœtus, marks indicating the direct infliction of violence by blows, or the puncture or laceration of sharp instruments, introduced by the vagina? All these, and other analogous circumstances, or the greater part of them, being combined, announce premeditation, and invest with an undoubted criminal character, the fact of abortion. It ought, however, never to be forgotten that, certain direct operations excepted, most of the other remedies and circumstances may have been employed, or have taken place, without the most distant intention, on the part of the woman, to procure abortion. Of this we have witnessed several unquestionable instances.

III. *Was the fœtus, at the period of employment of the expulsive means,*

endued with life? In resolving this last query, we shall refrain from all idle discussions respecting the period of animation of the fœtus; for the existence of organic life alone establishes vitality, and this dates from the moment of conception. It is here absolutely requisite that the body be examined: and, if this present depression of the fontanelles without traces of external violence, separation of the epidermis in many places, livid colour of the skin, a cadaverous smell, an almost pulpy softening of the muscles and viscera; a shrivelled, tender, fœtid, condition of the umbilical cord; a puffiness of the surface of the body, especially of the face and abdomen; we may conclude that the fœtus has perished anteriorly to its expulsion, without, however, being able to indicate precisely the period of death, or establish with certainty, in all cases, whether it have been determined by the employment of any peculiar means. Thus, for instance, if abortives have been used on the days just preceding abortion, and the mother have not felt the motions of her child for some time previously to such application, prudence and humanity would alike suggest the most favourable construction.—From what has been just said, it results, that the resolution of our third query is only practicable when the space of time, which has elapsed from expulsion to examination of the fœtus, is not sufficiently considerable to admit the supposition of extra-uterine putrefaction. The developement of this process is variable, and can only be appreciated, in an approximative manner, by a comparison of different circumstances.

After the view already taken of this subject in its physiological and physical aspects, it now remains for us to survey it as connected with Jurisprudence. In so doing, we shall cursorily examine the light in which destruction of the fœtus has been regarded by some of the more enlightened nations, and in different ages, of the world; the degree of criminality attached to the premeditated act; and of penal severity with which its perpetration has been denounced or visited. In fact, we shall trace the judicial history of procured abortion from a remote æra to the present time; and terminate the rapid sketch by an exposition of the state of legislation respecting the crime, as it now exists among us. To the influence which sound ethics, and the adoption of a vigilant and comprehensive system of jurisprudence may exert in preventing, or rendering less frequent, this outrage upon the best interests of society, moral and political, we shall also occasionally advert.

1. *Opinions of the Ancients respecting provoked Abortion;** and *Retrospect of Legislation, as it regards this crime, to the commencement of the present Century.* The opinions and practice of some of the more polished nations of antiquity with respect to voluntary abortion, constitute a feature, singular as dark, in the history of the human mind. The passages which,

* By medical writers, the term Abortion is generally restricted to expulsion of the human ovum before the close of the sixth month of utero-gestation: and that of premature labour to untimely parturition after that period. In juridical medicine, this distinction is destitute of utility. Laceration of the perinæum, we had nearly forgotten to mention as one of the signs of premature delivery. That it will not be observed in cases of abortion, or discharge of uterine hydatids, every one will be aware. We may further remark, that *clavus* or the ergot of rye has been lately recommended as a remedy which may be exhib-

in the commencement of this article, we have quoted from the Roman poets, incontestibly prove that destruction of the human embryo was not restricted to the tent of the wandering savage, or exclusively practised upon the fruit of illicit love. By the high-born matrons of imperial Rome, in the meridian of her greatness and illumination, the most sacred claims on the female heart were remorselessly violated, and the laws and interests of society, broken and sacrificed with shameless impunity. Some of the more celebrated philosophers of Greece had even recommended the employment of abortion as a mean whereby the equilibrium of population might be preserved; and the eloquent Cicero, in alluding to the case of a woman who had been condemned for destruction of her offspring, founded the justice of this decision rather upon the civil consequences, than on the moral turpitude of the crime.*

To what source shall we trace the introduction of these barbarous and unnatural prejudices among the enlightened nations of antiquity? On reverting to the civil history of these remote times, it will be found that abortion was regarded criminal or otherwise according to the doctrines of the prevailing sect of philosophy: and, by some of these, the embryo or fœtus was described as not animated by a rational and thinking soul. Now, of all the opinions of philosophers, those of the Stoics seem to have been most generally adopted by the Roman legislators: and, with an affectation of indifference peculiar to their sect, the disciples of Zeno regarded the union of soul and body as only first taking place in the act of respiration. Consequently, the fœtus, so long as it remained in utero, could not be endowed with a thinking soul. Applying, therefore, this abstruse and erroneous principle to criminal legislation, they utterly divested voluntary abortion of its atrocious character: and alike refused to the fœtus the title of a human being and the protection of human laws. It was merely named *Pars viscerum matris*, a portion of the viscera of the mother.† Thus, by metaphysical subtleties, wholly destitute of foundation in reason and experience, were the conquerors of the world governed; and thus was favoured the introduction of licentious morals, already too prevalent in the earlier ages of the Roman empire. Ideas, equally inaccurate, respecting the animation of the fœtus, probably exist among the uncivilized nations by which, at the present day, the employment of abortives is openly allowed or tolerated:

ited with powerful effect to expedite the birth of the child in lingering labour, or to obviate retention of the placenta. In addition to the property which this curious vegetable substance possesses of stimulating the gravid uterus, it is said to operate with considerable certainty in restoring the suppressed menstrual discharge. *Bigelow, on the Use of Clavus, or the Ergot of Rye. New England Journal of Medicine and Surgery. Vol. v. No. 2. See also Journal of Science and the Arts. No. iii.*

* *Memoriâ teneo quamdam mulierem, cum essem in Asia, quôd, ab hæredibus secundis accepta pecunia, partum sibi ipsa medicamentis abegisset, rei capitalis, esse damnatum; neque injuria; quæ spem parentis, memoriam nominis, subsidium generis, hæredem familiæ, designatum reipublice circum, sustulisset. Cicero. Oratio pro A. Cluent. Arito.*

† By the laws of Scotland, this obviously absurd principle is retained to the present day.

or, like the women of the island of Formosa, they are impelled to the act by certain religious principles which exclude all thought or imputation of crime.

To the same pernicious direction of the human mind may be principally attributed the occasional prevalence of destruction and exposure of infants in different regions of the globe. Warlike and republican people, haunted by the groundless dread of excessive population, looked upon child-murder as a necessary evil. Aristotle even declared his opinion that, in a republic, the number of citizens should be restricted, and the education of illegitimate offspring proscribed; and by Lycurgus, this horrible precept was transformed into a law. Strabo reports, that the inhabitants of Cathea subjected their children, at the age of two months, to the inspection of a magistrate, who selected the more robust for preservation, and condemned the rest to perish. A practice, somewhat similar, was adopted by the original founders of Rome. The Celts exposed their new-born infants upon a shield to the current of a river, and considered as legitimate only those who survived this perilous ordeal. From such revolting scenes of darkness and barbarism, it is cheering to turn and contemplate a nation distinguished by its humanity. The Thebans, a people who kept prostitutes in their temples, punished with death the exposure of infants; and provided, by a special law, for the education of those children whose parents were incapable of supporting them.

By the Hebrew law, heavy penalties were denounced against the crime of procured abortion, and even death, if the mother fell a martyr to its consequences.* Constantine the Great not only directed the towns of Italy and Africa to assist those who declared themselves unable to educate their children: he instituted the most dreadful punishment against destruction of the offspring.† Under the Emperors Severus and Antoninus, the absurd doctrine had been introduced that the fœtus only became animated at a certain period of utero-gestation. Hence, the distinction of animated and inanimate fœtus was set up: and, while infliction of an extraordinary penalty was deemed sufficient to expiate destruction of the latter, the murder of the animated fœtus incurred the utmost vengeance of the law. But Christianity, which had operated such great changes in the legislation of Rome, exercised an equal influence on every thing relating to her morals.—The successors of Constantine denounced with severity the crime of abortion; nor even admitted a distinction as to the rectitude or malignity of design with which the remedies, provoking it, had been administered. Renouncing the opinions of the schools, many fathers of the church observed, that the fœtus, formless as it appears, must be animated, since it grows; and adopted a maxim, alike salutary in its moral and practical operation: *Homo est qui futurus est*. Thus the Congress, assembled in Constantinople in 692, ordained that the crime of abortion should be punished with the same severity as homicide. Yet, either from a feeling of indulgence to human frailty, or from the dominion which the doctrines of Plato long held over

* Exodus. Chapter xxi, verses 22—23.

† Neque gladio subijgetur, sed insutus culeo, et inter ejus furales angustias comprehensus, serpentum contuberniis miscetur, ut omni elementorum usu vivus carere incipiat, ut cœlum superstiti, terra mortuo auferatur. Cod. Theodos. C. ix. tit. 15.

the fathers, the canon law was less rigorous than the Roman law, as reformed by the Emperors of the East: for by the distinction between the quick and inanimate fœtus, to which we have already alluded, the magnitude of the crime, and severity of the punishment, were judged and regulated. This distinction yet constitutes a feature in the legislation of several countries.—We scarcely need observe, that it is not less erroneous in principle, than hostile in practice to sound morality, and the vital interests of the social system.

By France, as by some other nations, the reformed Roman law was adopted in all its rigor. Midwives, and in general, all medical practitioners, convicted of the crime of provoked abortion, received sentence of death.—An edict of Henry II. confirmed by succeeding sovereigns, established little difference between the criminality of the female who concealed her pregnancy, or the wretch by whom a fœtus was secreted or destroyed. And letters of pardon were even sometimes requisite for the security of persons, who, ignorantly and without criminal design, had employed remedies capable of determining abortion, or been compelled to resort to this formidable expedient with a view of rescuing the mother from some more urgent peril. But the inflexible and indiscriminating spirit of the laws of Draco, which so long influenced the criminal legislation of every country where the Roman law was received, has ceased to operate. By the penal code instituted in the first years of the French republic, the crime of infanticide was made punishable by death, and that of provoked abortion, by twenty years imprisonment. “Life, in the contemplation of the *English law*, begins as soon as a child is able to stir in its mother’s womb; for, if a woman be quick with child, and any one by a potion or otherwise, killeth it in her womb, or beat her, whereby the child dieth in her body and she is delivered of a dead child, this, though not murder, was by the ancient law, homicide; but the modern law does not look upon this offence in quite so atrocious a light, but merely a heinous misdemeanour; yet if the child be born alive, and afterwards die in consequence of the potion or beating, it will be murder.”*

II. *Existing Legislation of the French and English Criminal Courts, with regard to the Crime of Abortion.* The French code of 1810, “more comprehensive, and better adapted to the nature of civilized man,” than its predecessor, decrees, that “whoever, by food, potion, medicine, violence, or any other mean, shall have procured the abortion of a pregnant woman,

* See *Blackstone's Commentaries*, Vol. i. p. 129; or *Male's Epitome of Forensic Medicine*, p. 113. We wish to restrict as much as possible the limits of this historical sketch. It may, therefore, suffice cursorily to observe, that, among the ancient inhabitants of Germany and Gaul, the person guilty of procuring abortion was allowed to expiate the offence by the payment of a sum of money; that, by the congress of Ancyra, in 314; of Lerida, in 524; and of Mayence, in 847; long penance, with, exclusion from the Sacrament, was decreed against the crime; and that capital punishment, eternal irregularity and excommunication, were respectively denounced, by the Roman Pontiffs, in 1588 and 1591, against the principal culprit, and every priest and layman, implicated as accomplices in the charge. Sextus Quintus reserved to himself the exclusive right of absolution. By Gregory this privilege was granted to every ecclesiastic.

either with her consent or otherwise, shall be punished with imprisonment ;” —that “the same punishment shall be denounced against the woman who shall have procured abortion in herself, or consented to employ means prescribed or administered to her for such purpose, if abortion have been the consequence of them ;” and, lastly, that “physicians, surgeons, and other officers of health (officers de santé), as well as apothecaries, who shall have prescribed or administered these means, shall, in the event of abortion taking place, be condemned to hard labour for a certain time.”* Finally, *the English law*, as it is at present framed, declares, that, “if any person, after the year 1803, shall wilfully and maliciously administer to, or cause to be administered to, or take any medicine, drug, or other substance or thing whatsoever, or use, or cause to be used or employed, any instrument, &c. with intent to procure the miscarriage of any woman, not being, or not being proved to be, quick with child at the time of committing such thing or using such means, then, and in every such case, the persons so offending, their counsellors, aiders, and abettors, shall be, and are declared guilty of felony, and shall be liable to be fined, imprisoned, set in and upon the pillory, publicly or privately whipped, or transported beyond the seas for any term not exceeding fourteen years.” By the same Act it is ordained, “that administering medicines, drugs, &c. or using means with the intent to procure abortion, *after quickening*, shall be punishable with death.”†

The crime of voluntary abortion, comprehensively examined, presents some important views, upon which, although not immediately interesting to the physician in the exercise of his juridical functions, we are anxious, ere concluding this article, to direct the attention of the moral and political philosopher. Seduced by the attractions of the subject, we have already transgressed the limits originally prescribed to ourselves in discussing it ; but the subject itself may, we hope, procure from the reader that indulgence and prolonged attention which our desultory and imperfect style of discussion will not be found to merit or excite.

What is the nature of the phenomenon termed quickening ? and does it afford any rational ground of distinction with respect to the period of animation of the fœtus ? Commonly, between the sixteenth and twentieth weeks from impregnation, the woman becomes sensible of a fluttering motion, sometimes visible even at a distance, in the lower part of the abdomen ; and often preceded, or accompanied, by a sensation of flatulence and faintness. This is called quickening, as supposed to denote the first movement, hence to constitute the earliest sign of animation, of the fœtus. But by some physiologists different, and, in our opinion, more rational explanations of this phenomenon have been attempted.‡ And if on the one hand, the axiom which we have adopted in the former part of this article be correct, that “the existence of organic life alone establishes vitality ;” and if

* See *Code Penal* (of France), § 317 ; *Foderé Traité de Médecine Légale*, tom. iv. p. 386 ; and *Dictionnaire des Sciences Médicales*, tom. ii. *Article, Avortement*.

† See *Statutes at Large*, 43 Geo. iii. cap. 28, and *Dr. Male's Epitome*, p. 114.

‡ Some late writers, in one of our periodical Journals of Medicine, (we forget which,) has given an ingenious explanation of the phenomena of quickening. The unimpregnated uterus, it is well known, lies completely within the cavity formed by the pelvic bones.

the doctrine of the venerable fathers, on the other, be undeniable in fact, as comprehensive and beneficent in operation; the distinction of inanimate and animated fœtus, introduced into the legislation of Rome, under the auspices of her emperors, and subsequently engrafted upon that of other European countries, should be utterly rejected.* Sophistry, indeed, may affect to trace, with subtle finger, the boundary which separates the crime of voluntary abortion before the term of quickening from those of destruction of the fœtus at a more mature period, and of infanticide. The unerring voice of truth and nature disclaims its acknowledgment. In fact, to the eye of reflection, child-murder, and destruction of the shapeless embryo, present a character equally atrocious; and in their influence upon the moral and physical constitution of human society, inflict a wound equally deep and malignant. Opinions, like these, cannot be too often or too strenuously inculcated on the public mind. Whether doctrines, wholly unsound in principle, can be consistently retained in practice, forms a query, which it is the province of men more deeply versed than ourselves in the science of legislation to agitate and resolve. In medicine, the solution of such a problem would require but little deliberation.

Yet, should we be disposed to deprecate any law, which, like the unsparing edict of Henry the Second of France, might regard, as equally criminal, the concealment of pregnancy and destruction of the offspring, and punish, with indiscriminate vengeance, the unhappy victim of seduction, and the monster reeking from the premeditated sacrifice of her child. A law, indeed, thus worthy of the genius of Draco, must have been founded on very superficial and inaccurate views of the female character; and will, we hope, never again disgrace an European code of legislation. Many an unfortunate woman will shrink from a humiliating confession of her shame, in the vague hope that death may intervene to conceal her wretchedness and dishonour; who would reject with disdain the proffered instrument of abortion, and rather endure the extremes of misery and neglect, than raise the weapon of destruction against the life of her offspring.

But as no dread of penal consequences can ever operate to the utter suppression of the crime, the views of a wise legislature should be directed, rather to the means of prevention than those of punishment. It would be foreign to our subject to enter formally upon this comprehensive field of discussion. We shall content ourselves with throwing out a few hints upon the means best calculated to diminish the frequency of voluntary

Impregnation having taken place, the organ gradually enlarges, and the time must obviously come when it can no longer be confined within such narrow limits. Arrived at a certain point of expansion, the uterus at length suddenly emerges from the pelvis into the abdomen; and thus, contends the gentlemen in question, the motion, and all the train of sensations attendant on quickening, are produced.

* By some of the ancient legislators, the period of animation of the fœtus has been fixed at forty days; by some at seven days; by others at eighty. The fact is, vitality dates from the first stroke of the *punctum saliens*, and the future development of the fœtus is steadily progressive. Hence the rude and mis-shapen embryo has the same relations with society, the same claim upon the protection of its laws, as the more mature fœtus. EDIT.

abortion and infanticide. They will admit of separate consideration, as exercising a moral operation, or coming within the department of medical police.

Whether pregnancy be the consequence of legitimate union, or illicit intercourse, it presents an equal claim upon the interest of society. This principle, however neglected in times of ignorance and barbarism, is now acknowledged in our systems of legislation. Yet public opinion inflexibly retains its ancient severity, and continues uninfluenced by the mild and indulgent temper of modern institutions, which that principle has served to inspire. We are far from considering faulty that direction of ideas by which purity of morals, and the maintenance of social order, are promoted and secured: we wish not to see the dishonoured female and the virtuous wife placed in the same rank, and attracting equally the consideration of society. Against that rigid intolerance of the public mind we protest, which loads with exclusive infamy the victim of seduction; while the more guilty author of her wretchedness, unmolested by the execration which he merits, and little if at all degraded in public estimation, pursues elsewhere his infamous career. Some French writers have gone so far as to declare, that those countries, in which the laws of chastity are most severe, and their violation is most heavily fraught with dishonour, exhibit more frequently than others the crime of child murder and abortion.* We shall refrain from expressing our own opinions on this subject, lest, while advocating the cause of the injured and destitute female, and urging her potent claims to mercy and commiseration, we should be suspected of a wish to sap the foundations of morality, and set up ourselves as the apologists of profligacy and crime. Nothing is more distant from our intention. How far the exertions of the legislature to facilitate and promote marriage among the inferior classes of society, by conferring peculiar privileges and exemptions on the wedded state, might operate in repressing the dreadful crime of foeticide, is a query more readily proposed than decided.

We have, secondly, to consider the influence which a vigilant system of jurisprudence may exercise in preventing the frequency of this inhuman practice. The waste of human life, resulting from voluntary abortion, or from attempts to provoke it, is, we are convinced, far greater than they whose attention has never been directed to the subject, or possess not the requisite means of calculation, will be disposed to credit. There is scarcely a town or village in the kingdom where this horrible traffic is not carried on with fearless impunity, and the uncouth instrument of some mercenary wretch occasionally employed to bring about what the midwife or emmenagogue of the druggist has previously failed to accomplish. Many young women, the victims of obscure and violent disease, annually perish from this unsuspected cause. Any thing like a remedy for this deep and insidious evil, it is in the power of the Legislature alone to furnish and apply. The Act which we have last quoted, is inadequate to its suppression. Under the specious title of emmenagogues, powerful preparations of the hydrargyrus, lytta, and other violent intestinal stimulants, are yet prescribed or administered with little hazard or precaution. A law, which, rigorously

* *Dictionnaire des Sciences Medicales*, tome ii. *Article, Avortement.*

enforced should prohibit, under severe penalties, all persons from prescribing, administering, or employing any remedy, medicinal, dietetic, or mechanical, in cases of suppressed menstruation or suspected pregnancy, except by the advice or with the sanction of a regularly educated physician or surgeon, would probably go far to restrict the operation of the evil, and diminish the mortality consequent on it. That any British practitioner of medicine could so far forget the object of his art, or pollute the dignity of the professional character, as to undertake, from mercenary considerations, the work of assassination, is incredible: we will not dishonour our country by admitting the supposition.

An important question, relative to the subject of abortion, lastly, presents itself for our consideration. In extreme cases of malformation of the female pelvis, where delivery of the fœtus at the full term is obviously and utterly impracticable, may abortion or premature delivery be justifiably induced, and thus the life of the child be sacrificed to the preservation of the mother? This point has been long and warmly contested. The respectable and conscientious Mahon formally protests against the practice; but his arguments are ably refuted by Fodéré; and most of our readers will, we imagine, concur in the opinion of Dr. Male, that it is both "legally and morally right rather to save a certain and valuable life than risk it for an uncertain one;" and that the propriety of the expedient is alike "sanctioned by humanity, policy, and justice." Nor should it be forgotten, that, in such cases, the life of the infant is not invariably sacrificed; for it sometimes, though rarely, happens, that a fœtus, born before the seventh, and even at the fifth month of utero-gestation, will live and ultimately do well. Several such cases, most respectfully attested, are upon record.*

XIV.

REVIEW OF THE MEDICAL DEPARTMENT OF THE EAST INDIA COMPANY.

For several years past we have witnessed, with pain, the depressed state of the medical profession in this country. The ranks of medical society are so crowded, that the professors of a noble art are driven, by actual want, to the most disingenuous devices—to the necessity of stabbing one

* A case of this kind is cited by Mahon from Brouzet. See also a case by Dr. Rodman, Edinburgh Medical and Surgical Journal, vol xi. p. 455. We take this opportunity of calling the attention of the reader to an error which we have discovered in the commencement of this article, and which, however obvious, we think it right to notice. In describing the *internal signs* of pregnancy and parturition, we mentioned, that they will be more strongly marked in proportion as utero-gestation is farther advanced, and will disappear shortly after delivery; but from this description the *corpora lutea* of the ovaries should be excluded, as they generally remain visible during life.

another's reputation, and preying on the public at large! There can be no doubt that this redundancy in our ranks is only part and parcel of that general redundancy in all departments of civilized life. The law has felt it for some time, and a heavy prohibitory fine is about to be levied on all who enter that learned profession. We do not suppose that such a measure is practicable in medicine, though we are far from thinking that it would be prejudicial to the profession at large, or to the public generally, however hard it might bear on individuals, or however it might press on humble merit.—The fact is, that we stand more in need of liberal education and honorable conduct, than of talent without these qualifications. There is little danger of want of ability in the rising generation of the profession; but there is every reason to apprehend a dreadful deficiency of liberality and high-mindedness—partly from the crowded state of medical society—partly from the leaven of corruption and vulgarity which is plentifully disseminated in the present day.

We have now, however, to draw attention to a great outlet and field for medical talent, which has hitherto attracted a crowd of competitors, but which is likely to prove a source of dreadful disappointment to great numbers of our medical and surgical aspirants. The amplitude of our East-India possessions, and the encouragement which has been held out for medical students to embark for those burning climes, there to spend their lives under the confident expectation, or even assurance, that a youth, or rather a "life of labour" would be crowned with an "age of ease," have caused the portals of the Temple, in Leadenhall Street, to be almost choaked with candidates for obtaining the golden fruit of the pagoda-tree. In the best of times, this attractive fruit was dearly purchased at the expense of banishment, sickness, and premature old age, if not untimely death. Now, however, the fruit is taken away, and it appears that the medical practitioner, in the service of our Honourable East India Company, is estimated somewhat under a butler in London! By the said Company a man is considered as far inferior to a horse—and consequently a surgeon is subordinate to a black-smith! Our rising cholera has been checked, indeed, by one redeeming principle or sentiment, which the COMPANY have lately evinced, and which must command the respect and esteem of the world. Wisely considering that the life of man is transitory in this sublunary scene—that it is bounded to three score years and ten, at the most; and, *in their service*, to little more than half that duration, while the soul flourishes in eternal youth, beyond the boundaries of matter, they have very properly estimated the SURGEON, who has charge of this vile body, as a cypher, while the CHAPLAIN, who directs the ethereal spirit to its future abode of felicity, is considered as a most important personage, little inferior to the Pope, or even to St. Peter, with the keys of Heaven in his hand! These observations will scarcely be believed, or even understood, till the following document is perused:—and we deem it a duty, which we owe to our profession, and to the fathers of medical youths, who may be fondly dreaming of golden settlements for their sons beneath the Torrid Zone, to publish this memorial entire, in order that they may know the extent of misery which they are unconsciously preparing for their offspring.

THE MEMORIAL

OF THE MEDICAL OFFICERS OF THE BENGAL PRESIDENCY, WHOSE SIGNATURES ARE HEREUNTO ANNEXED, TO THE CHAIRMAN, DEPUTY CHAIRMAN, AND DIRECTORS OF THE HONORABLE THE EAST INDIA COMPANY, &c. &c. &c.

WE the undersigned Medical Officers of the Bengal Presidency, most humbly and respectfully solicit the attention of your Honourable Court to the existing state of the medical department of this country, which, by the recent abolition of the medical contract hitherto in force, is so entirely changed in its character and provisions, and the interests of your Memorialists are so deeply affected thereby, that they feel themselves warranted in submitting this detailed statement of their grievances to the favourable consideration of your Honourable Court, in the anxious hope that they may be speedily relieved from those just, and urgent grounds of complaint, under which they at present suffer.

The emolument derived from the late medical contract, though perhaps objectionable in its principle, nevertheless afforded to a certain extent an average remuneration to Medical Officers, proportionate to the duties performed, the abolition of which, both in its present effects and its future consequences, entails on your Memorialists, and more especially on the junior grades, a state of embarrassing poverty and ultimate ruin, which they persuade themselves could never have been contemplated by your Honourable Court as a result of the orders of the Governor General in Council, bearing date 29th November, 1828.

Your Memorialists entered the service of the Honourable Company confidently relying on the permanency of those advantages which were enjoyed by the Medical staff of this presidency, and of which, from whatever source derived, your Memorialists could never have contemplated any diminution, as even under their operation the average income, received by Medical Officers could be considered a bare equivalent for the laborious and important duties assigned to them.

Previous to entering into those details which they consider essential to a due estimate of their claims by your Honourable Court, they earnestly solicit a full restoration of the average income they formerly enjoyed, and of which, on the principles of equity, they humbly conceive they ought never to have been deprived. Your Memorialists having thus briefly submitted the sum of their petition, and the grounds on which they justify their claims, feel themselves called upon to state, for the information of the Honourable Court, the following aggregate of facts, as demonstrative of that inferiority, in point of respectability and ultimate provision, which they have at all times suffered, in comparison with every other department of your public servants.

The subjects which your Memorialists beg to press on the attention of the Honourable Court, is the great length of time indispensable to the attainment of their professional education and the heavy attendant expenses which equal if not exceed those incurred in the acquisition of any other liberal profession; and, with reference to such expenses, your Memorialists assumed, on premises acknowledged to be indisputable, the well-grounded expectations of an adequate return, in whatever channel they might have directed their talents and exertions, but which your Memorialists most deeply lament were never realized, and are now totally annihilated.

The comparatively advanced period of life (that of 23 to 25 years of age) at which your Memorialists enter the service, is the unavoidable result of the time employed in the course of education, as above stated; a consequence of the utmost moment to your Memorialists, as involving the rate of promotion; since by the operation of the orders above referred to, combined with the numerical strength of the medical list, your junior assistant surgeons are entirely shut out from the prospects of attaining the rank of surgeon, under a period of from 17 to 20 years, during the whole of which time, it is absolutely impossible for them, in the receipt but of a bare subsistence, to support that relative rank in society they have hitherto maintained, far less to procure those ordinary comforts of life, which habit, climate, and education have rendered indispensable.

From the facts herein adduced, it necessarily follows that a medical officer, should he even live to attain the rank of a surgeon, will have reached the age of 43 or 45 years, when

he may avail himself of the miserable pension of £ 191 per annum, a sum utterly inadequate to support him in the rank of a gentleman and totally disproportionate to his past services.

The prospects of your Memorialists, even when advanced to this rank, though placed on a somewhat fairer scale of remuneration, will appear but little improved, when the numerous contingent disadvantages are duly considered;—for it will be evident to your Honorable Court that thus, after 20 years service, are they, for the first time, enabled to save a fraction of their allowances, to defray either the expenses of a furlough to Europe, or to add to their future provision; while it must be borne in mind, that no individual can pass 20 years continuously in a tropical and unhealthy climate, without materially suffering in health and constitution; and this more particularly applies to your Memorialists, exposed as they necessarily are, in all seasons and under all circumstances, not only to the fatigues and duties of the military profession, but to the labour, trouble, and anxiety of their own.

Adverting to their next higher grade of superintending surgeon, a rank not heretofore attained under an average period of 16 years more, your Memorialists beg to observe that the obstacles to promotion already mentioned will, in future, defer that prospect to an almost indefinite period, certainly to one by which they will have attained the age of 60 years;—and even then, after nearly 40 years' service, they cannot claim the trifling pension of that rank, till they shall have served an additional two years in that situation, an act of illiberality and injustice inflicted on no other department of your public service.

On a review of the facts above stated, it must necessarily be inferred, that your Memorialists can never entertain the most distant hope of reaching the highest grade of your medical service, viz. the Medical Board, under four and forty years, and at the advanced age of seventy; a period of human life far exceeding that generally attained in this or any other country.

The deplorable situation of your Memorialists must be sufficiently apparent to your Honorable Court, from the general outline of their grievances above stated; and they persuade themselves that they do not incur the charge of presumption, in preferring the question, with all humility and respect, what possible contingency, in their case, could have caused, much less perpetuated or extended, so total an absence of consideration for their character and services as a comparative view of their condition cannot fail to evince.

Possessing an imaginary rank in the army, without enjoying any of those privileges or prospects to which the real possessors of such rank are entitled, your Memorialists are, from the exclusive nature of their profession, necessarily ineligible to those various places of rank and emolument, which are open to the purely military officer of whatever grade; and, so far from receiving any equivalent for those disabilities, in any corresponding situations in their own department, their present and future provisions are totally disproportionate to their actual or eventual services, while it cannot be supposed that a medical officer can look forward with satisfaction to the retiring pension of £ 191 12s. per annum, when he may have served 20 or 36 years—of £ 300 per annum, after 36 to 44 years—of £ 500 per annum, after 44 to 47 years, at the respective ages of 43 to 45 years, for the first rate of pension—59 to 61, for the second—and of 67 to 71, for the third; your military officers, in the mean time, enjoying a superiority of advantage in this respect, in the following rates.

- 1st. The military officer may retire in 25 years, at the age of 41, upon £ 273 per an.
- 2d. In 28 years, at the age of 44 upon £ 365.
- 3d. In 33 years, at the age of 49 upon £ 1000.

Contrasts so forcibly exemplified in themselves, as to require little comment in further explanation of the great inferiority of your medical service. And hence it appears how totally suppositious are the advantages held out to your Memorialists on entering the service by the regulation in the East India Directory at Home, under the sanction of your Honorable Court; the plainest inference deducible from which is the possibility of the ranks of superintending surgeon and of member of the Medical Board being attained in the periods therein mentioned, viz. 17 to 20 years; results which have never yet or ever can obtain in the medical department of this presidency, where the ratio of promotion to the highest situation is in the proportion of 1 to 130 of the total establishment.

Nevertheless your Memorialists disclaim the most distant imputation of invidiousness at the better fortune of their military brethren, or of any other branch in your honorable service; but they have deemed it necessary to particularize the above contrasts, in order to shew, beyond question, their real state of comparative inferiority, in relation to other departments; in further illustration of which fact, they beg to advert to your military chaplains, who enter your service at the corresponding ages of your Memorialists, (without having incurred one half of that expense necessary to the medical education,) and whose income, from the day of their arrival in India, exceeds that of your military servants, even after a period of 20 years service, independent of the incomparable advantages the former enjoy of returning to Europe, after the short period of 15 years, on the pension of lieutenant colonel, viz. £ 365 per annum.

It would be illiberal on the part of your Memorialists, to draw any comparison between themselves and your ecclesiastical servants; but, on the score of public utility, arduous duty, general information, and professional character, it cannot be shewn that the latter possess any claim on your Honorable Court for a scale of remuneration so superior to that granted to your Memorialists.

In proving this their abject condition, your Memorialists use this line of argument, not, as above declared, from feelings of envy: but purely and honestly to draw your attention to the urgent necessity of its speedy amelioration; and, in this spirit, they beg to adduce a further instance of their merits and claims being totally overlooked by your Honorable Court, in that countenance and provision you have, to the ignominious prejudice of your medical establishment, vouchsafed to a class of persons lately introduced into your service, under the denomination of veterinary surgeon.

Your Memorialists, in no degree doubting the utility of the veterinary art, or indeed of any other contingent branch of knowledge, studiously avoid entering into any comparative enquiry as to its nature and character, or the time and expense necessary to its attainment; but it is indeed, with feelings of humiliation and regret, that, for the first time on record, they should be held forth to the world by your Honorable Court, as less worthy of remuneration for the care and responsibility incurred by them for the preservation of the health and lives of their fellow creatures (your Honorable Company's lieges) than those intrusted with the lives and health of the horses in your Honorable Company's army; a feeling so derogatory to human nature generally, and more especially, in its application to the character of your Memorialists, that they persuade themselves your Honorable Court could only have been betrayed to evince it by some informality or inadvertence in the routine of official business.

The following Table, extracted from the orders of your Honorable Court, bearing date the 27th October, 1827, and from the General Orders of your supreme Government, dated 9th February, 1828, exhibit the ignominious contrast above alluded to.

Pay and Allowances of Veterinary Surgeons under three Years Service for Charge of 400 Horses, the strength of a Cavalry Corps.	Per Mensem.			Pay and allowances of Veterinary Surgeons above three Years Service for Charge of 400 Horses.	Per Mensem.		
Pay	97	6	5	Pay	121	12	0
Batta	121	12	0	Batta	121	12	0
Gratuity	24	0	0	Gratuity	24	0	0
Tentage	50	0	0	Tentage	50	0	0
Horse Allowance	47	13	3	Horse Allowance	47	13	3
Pallanqueen Allowance	30	7	0	Pallanqueen Allowance	30	7	0
Total Sonat Rupees	371	6	8	Total Sonat Rupees	395	12	3

Pay and Allowances of an Assistant Surgeon for the sole Medical charge of 800 Officers and Men, exclusive of their Families, Servants, &c.	Per Mensem.	Pay and Allowance of an Assistant Surgeon for Medical Charge of 800 Officers and Men at an Half Batta Station.	Per Mensem.
Pay	60 14 0	Pay	60 14 0
Captains full Batta	182 10 0	Captains half Batta	91 5 0
Gratuity	24 0 0	Gratuity	24 0 0
Tentage	50 0 0	Half Tentage	25 0 0
Palanqueen Allowance	30 0 0	Palanqueen Allowance	30 0 0
		House Rent, if not provided } with Quarters }	30 0 0
Total Sonat Rupees . .	347 8 0	Total Sonat Rupees . .	281 3 0

Your Memorialists beg to observe that, from the constitution of the medical department in this country, it appears to have been assumed that they were not naturally liable to that decay of health and constitution consequent on length of service in a tropical and unhealthy climate, in common with their countrymen and fellow servants; since no provision for such contingency has ever been recognized for that department, a subject to which your Memorialists earnestly crave the consideration of your Honorable Court.

Your military servants, in the junior ranks of lieutenant and captain, when disabled from active military duties by sickness or broken health, are eligible to various local appointments, yielding a comfortable subsistence, in the invalid battalions, garrisons, paymasterships of pensions, and several others which it is unnecessary to detail; while, in the higher ranks of major and lieutenant colonel, the command of provincial battalions, invalid tannacks, local corps, invalid corps, and garrisons, not only affords them a handsome independence, but, in fact, equals in many instances, the allowances of those in the line, without entailing on the one the expenses or important duties of the other; while the maximum of pension granted to a medical officer, who may have served your Honourable Company from 36 to 44 years, is only 300 sonat rupees per month.

The non-existence of such provision in the medical department, is the more to be regretted, not only as it now or eventually affects those who from misfortunes or embarrassments may never have the means of returning to Europe, but more especially as it involves consequences injurious to humanity by your medical servants being compelled to remain in the performance of important duties, to which from broken health and constitution they are unequal, and from the discharge of which it cannot be doubted they would gladly retire on receiving an adequate provision in the invalids establishment, without which it would be unreasonable to expect they would willingly relinquish their only means of support.

The principle of an adequate provision on a footing of respectability and comfort for all grades of your military servants when worn out and incapacitated for active duty by climate and length of service, has been fully recognized and long acted upon by your Honorable Court, not only in regard to your European, but to your native servants also, and your Memorialists trust such an exception in their case will no longer be upheld; and that your Honorable Court will sanction such arrangements in the fixed allotment of the medical duties of garrisons, civil stations, and invalid pay, as would yield a comfortable provision for those members of the medical profession labouring under the above-mentioned circumstances, a measure which, on the score of promotion, would prove at the same time as beneficial to the medical, as its operation proves to be in the purely military department.

In the assimilation of rank of the officers of the army with those of His Majesty, your Memorialists have, in the grades of assistant surgeon and surgeon, the corresponding nominal ranks assigned them of lieutenant and captain; but this correspondence of rank

in the two medical departments ceases with reference to the superior grades, and hence your Memorialists are excluded by the regulations of your service from that distinction and respectability in the army and corresponding rate of income enjoyed by His Majesty's medical staff; an anomalous privation to which your medical servants are alone subjected.

This will be obvious to your Honorable Court, on reference to the Pay-Table of the Medical Staff in His Majesty's Service, by which it appears that a Surgeon, after 14 years' service, receives 14s. 3d. per diem. A surgeon after 18 years' service receives 19s. 10d. per diem. In the next rank, that of physician to the forces, 19s. per diem. Of deputy inspector of hospitals, 1l. 3s. 9d. per diem. Of inspector of hospitals, 1l. 17s. per diem. Of principal inspector of hospitals, 1200l. per annum. Of director general of hospitals, 2000l. per annum.

The above scale of remuneration strongly exhibits the unmeasurable superiority enjoyed by the medical department of His Majesty's service, when contrasted with that of your Honorable Company; while the numerous other advantages attendant on these medical grades, (advantages not existing in your honorable service,) render the contrast still more unfavourable to your Memorialists.

The most general and important of these advantages consist in the medical officers of His Majesty's army being chiefly employed in, and deriving their emolument from, numerous medical situations distributed throughout their native country, as hospitals, garrisons, and depôts;—head quarters of military and recruiting districts, those of the ordnance department, and various others unnecessary to mention, exclusive of the many medical staff appointments in His Majesty's colonies, not only in the West Indies, but in the Mediterranean, the Cape of Good Hope, the Mauritius, Ceylon, New South Wales, and the Canadas, all of which have corresponding local advantages, or contingent as comfortable quarters, free of expense, wine free of duty, coals, candles, forage, general cheapness of living, and, in most parts, an equalization of currency, and by exchanging appointments with their professional brethren in Britain, they may continue to enjoy these peculiar advantages, the absence of which in your service entails on your Memorialists a state of perpetual exile from their home and country, a sacrifice required of them without any corresponding or equivalent benefits being conferred.

As a practical instance of the want of corresponding rank in the army, we beg to adduce the case of Dr. Burke, His Majesty's inspector of hospitals in Bengal, who from his corresponding rank of colonel in the army, receives the same amount of salary as the members of your Medical Board, and for this reason shared in the distribution of prize money for the capture of Bhurtpore with the officers of that rank, while Mr. Superintending Surgeon Reddil, the senior in rank of all the Company's medical officers, present on that occasion, shared only with majors after a period of 36 years' service, and in the performance of similar duties; an unjust distinction, not only implying an inferiority of merit, but entailing a pecuniary loss to your Memorialists on a casual occasion only once to be expected in the longest course of military service, and consequently the more to be valued.

Your memorialists have yet to advert to a resolution of your Honorable Court published by your Governor General in Council, in military orders, No. 254, of the 29th of November last, equally afflicting your Memorialists in common with your other military officers, by subjecting them to a loss of half batta, at the four principal lower stations of the army of this presidency;—a measure they cannot look upon without alarm and dismay, as they consider it a direct infringement of that implied understanding on which they entered your service; a breach of contract, if once recognized, that may be extended ad libitum; for on the same principle, your Honorable Court may withhold the remaining portion of their allowances, either wholly or in part, or even the amount of their retiring pensions; and, in respect to themselves individually, they cannot understand an assumed principle in the same orders, wherein, with advertence to the abolition of the medical contract, the full batta of captains and majors is granted respectively to assistant surgeons and surgeons, as compensation or in lieu of the said contract, while that very compensation is entirely neutralized by another provision of the same order, thus depriving your Memorialists of all indemnification whatever.

The pay tables of 1796, fixing on a permanent scale the allowances of the Bengal army, were not adopted till after a full discussion of their provisions and ultimate sanction of his

Majesty's Ministers; consequently, your Memorialists believe, with due deference to your Honorable Court, that no authority, short of that which established the scale of their pay and allowances thirty years ago, can now diminish them a single fraction, and that they are legally secure from any inroad on their income, till their claims are again discussed in the British Parliament, and settled by its decision under the control of the officers of the crown; neither can they imagine that a power temporarily delegated by the Sovereign to a corporate body can diminish the pay of the Officers of a large portion of the integral army of the state (which the Native army of India undoubtedly is) when a like authority is withheld from His Majesty in regard to the army of England.

But waving for the moment all consideration of equity, justice or policy, no stronger argument can be adduced against the diminution of our allowances by the introduction of Half Batta, than that furnished by your Honorable Court; and your Memorialists respectfully solicit reference to your military letter addressed to the Government of Fort St. George, bearing date the 15th September, 1809, where, in the 65th Para, the injustice of such diminution is fully recognized, as will appear by the following extract. "The persons nominated to civil and military employment have entered the services perfectly aware of these inequalities, and are therefore not entitled to expect they should be afterwards removed," and this idea of a general equalization of allowances throughout the three Presidencies so decidedly and justly resisted at that time by your Honourable Court, as a direct breach of the covenant and mutual stipulations, under which your civil and military officers were engaged, has now, by the enforcement of the late order of your supreme Government, No. 254, of the 29th November last, been fully acted upon; exhibiting an alteration in the sentiments and reasoning of your Honourable Court, so totally at variance with those clearly expressed in 1809, and so injurious in its effects to the interests of your Memorialists, as can be justified by no plea of expediency and necessity, nor reconciled to the most ordinary principle of good faith:—while it is impossible to characterize the strange anomaly existing in the said order, where, by the privation of one half of their Batta, the nominal equivalent granted to your Memorialists as a compensation for the loss of the medical contract is withheld from them, even in this, the very order announcing it; and if the admission of your Honorable Court, in the 64th Para, from the same letter, "that the style of living among Europeans has gradually adapted itself to the scale of income," were tenable and recognized in 1809, how many thousand times more urgent does it become in its application to the circumstances of the present period, when the actual expenses of the most common necessities of life, of servants, &c. have trebled or quadrupled. The enormous depreciation of the currency and consequent loss of exchange, losses incurred in houses by abolition of old or formation of new military stations (for which, to whatever amount, no compensatory allowance is ever granted,) duties augmented on articles of every description, and especially the ruinous expenses of travelling, to which all military officers are exposed from the greater extension of territorial possession and increased distance of stations, but to which your Memorialists, as belonging to the whole army, are peculiarly subjected, being frequently called upon on the shortest notice, to pass from one extremity of the Bengal Presidency to the other, to the detriment of their health, and to the total ruin of their finances; disadvantages which, when combined and maturely considered, not only oppose most forcibly every idea of reduction, but most imperatively call for an augmentation of their allowances.

To those natural feelings of dissatisfaction which your Memorialists have ventured to express, should it be answered that their further services are not compulsory, and that they are at liberty to withdraw them, we beg to state to your Honorable Court, that such an assumption is totally erroneous, as they have neither realized the amount of the heavy expenses incurred by their early education, &c. or even the means of returning to Europe; but imagining, for an instant, they had done so, what indemnification would such return be to them for the sacrifice they irrecoverably made in entering your service, when, relying on the integrity and justice of your Honorable Court, and on the permanency of the advantages held out to them, they left their native country, their families and connexions, under whose countenance and by whose assistance, they would have been enabled, at that time, to have established themselves in public life, an opportunity now lost to them for ever—

which circumstance alone will doubtless induce your Honorable Court favourably to listen to and speedily to grant the prayer of your Memorialists.

In further illustration of the systematic neglect, and of the very subordinate character in which the medical department of this Presidency is held, may be adduced the total want of patronage in the members of the Medical Board, whose professional abilities, experience in the country, and knowledge of individuals, would, it is supposed, have pointed them out as the most proper distributors of it; but superintendence is rendered nearly nugatory by their inability to reward merit, or encourage talent, thus compelling your Memorialists to court the patronage and support of the military officers commanding Divisions, Brigades, &c. and more especially of the Adjutant General of the army, whose abilities, great and transcendent in their military capacity, can never be increased by a dubious judgment of the comparative merits, and qualifications of medical officers, the operation of which system is highly detrimental to the service generally, but particularly so to the department of your Memorialists, *since a struggle for interest and favour supersedes the honest emulation for fame, rank, or emolument.*

That this department of your service has been ever and only considered as an inferior and degraded appendage to your civil and military establishments, will appear from the fact that, in the arduous and harassing campaigns in which your Bengal army has been engaged during the last fifteen years (with two individual exceptions) no public acknowledgement of any kind, has ever been paid to its members, however great or meritorious their services—however anxious and responsible their duties—to whatever severe and painful trials their feelings may have been subjected! To the due performance of the duties assigned to them, duties in which all personal feelings are merged in the alleviation of suffering humanity, there is a degree of mental satisfaction which no contempt or neglect can diminish, and the enjoyment of which, is the only reward of your Memorialists; but as men of honorable feeling and liberal education, they are not insensible or culpably indifferent to the approbation of their superiors and associates, whose opinion of them is generally formed, not on their merits (which they cannot appreciate) but on their rank in public estimation; and, in confirmation of these ignominious privations and invidious distinctions having been long and actually felt by your professional servants, may be incidentally mentioned a well attested fact, *that no medical officer in this Presidency, for the last 20 years, has ever sent his son to India in a medical, though many have done so in a military capacity!!*

From this detailed statement of their grievances and hardships, and of the disqualifications and disadvantages they suffer, it will be manifest, to your Honorable Court, that your Memorialists are an ill-paid, neglected, and degraded class of public servants, and they appeal to the liberality, justice, and honor of the Court, that, when this their true and deplorable condition is examined and reflected on, such a revision may be made in the whole system of the medical department, as will place your Memorialists in that rank in society to which they are entitled, and raise their allowances to a just scale of indemnification for their service and sacrifices; and they trust they do not incur the charge of presumption, or of assuming the language of dictation in suggesting the following as a scale consonant to these intentions, and which, in their humble judgment, is the least that can be considered as a fair and adequate remuneration.

1st. That the junior grade be divided into three classes according to length of service, with proportionate allowances in each; that assistant surgeons (3d class) from their entrance into the service to the expiration of five years, receive each in all situations while actually holding any medical charge, the sum of 400 rupees per mensem, subject to a monthly deduction of 100 rupees previous to his joining such charge, or when absent on private affairs or medical certificate.

2d. That from and after five years service assistant surgeon's (2d class) receive for the next five years ensuing, the sum of sonat rupees 600 per mensem, subject to a similar deduction.

3d. That from and after ten years service, assistant surgeons (1st class) receive the monthly sum of 900 rupees, till their promotion to the rank of surgeon, subject to the same deduction under similar circumstances.

4th. That a regimental surgeon holding medical charge of a Native cavalry, infantry, or artillery corps, receive in all situations, 1000 rupees per mensem, and when in charge of

an European corps, an additional 260 rupees, or a total of 1260 a month, subject, in both instances, to a deduction monthly of 200 rupees when absent on leave, &c.

5th. That an intermediate medical grade be established between the regimental surgeon and superintending surgeon, corresponding in rank to that of deputy inspector in His Majesty's army, under the designation of "Cantonment Staff Surgeon," for the duties of the head quarters of military divisions, and with a proportionate salary.

6th. That the pay and allowances of superintending surgeons remain as at present, and that members of the medical board receive sicca rupees 3000 per mensem; and in reference to the above scale, that the furlough pay, allowed in each rank be as follows;—

To assistant surgeons, if compelled to return to Europe on account of ill-health, at any time previous to ten years actual service in India £150 per annum. And after ten years until promoted to the rank of surgeon £200 per annum. Regimental surgeons, and all other classes £300 per annum, for the established period, viz. three years.

Considering their duties equally important and their services equally valuable as those of any other of your public servants, your Memorialists submit that the amount of their retiring pensions, now so miserably small and inadequate, should be put on a fair and full equalization with those of military officers and chaplains, a claim to which on the bases of equity, justice, and expediency, they conceive themselves fully entitled, but of which they have been hitherto deprived, and the following scale proportioned to length of service which your Memorialists venture to submit for the approval of your Honorable Court, is neither extravagant in itself, nor when viewed comparatively does it exceed that granted to military officers after a similar period of service.

We therefore entreat your Honorable Court, that a medical officer of whatever grade should be allowed after a continuous period of service of 17 years, the retiring pension now granted to your military chaplains, and after a period of 25 years £450 per annum; from 25 to 36 years £600 per annum; and from 36 to 44 years £1000 per annum.

Pensions, which, from the great mortality in all classes of your medical servants, can never form any considerable feature of expense to the Honorable Company, as will clearly appear by reference to the total existent amount of retiring pensions to the medical staff of this Presidency, and which pensions, while they indicate a juster appreciation of the merits and abilities of your Memorialists, and secure to them a fair and suitable remuneration, directly conduce to the welfare of your service, by promoting the efficiency and respectability of the medical department, whose high character for intelligence and humanity, under circumstances the most trying, has been ever maintained and acknowledged, not only by your own servants but by the unanimous suffrage of their professional brethren throughout the world.

Your Memorialists therefore conclude their appeal to your Honorable Court by earnestly and anxiously pressing on your notice the urgent and indispensable necessity of immediately relieving them from that state of degradation and poverty under which they now so unjustly suffer,—confidently relying on the justness of their petition and on the liberality of your Honorable Court,

We have the honor to subscribe ourselves,

Your faithful humble Servants, &c. &c.

We have given promulgation to this memorial from a sense of the great hardships and injustice under which our medical brethren of the East now appear to labour—and as a warning to those who may be preparing to embark for that fatal and melancholy climate, under the delusive hope that their services there may be either appreciated or rewarded. For our own parts, we would not send a dog for whom we had any regard, into the medical department of the Company's Service, if that faithful animal were capable of holding a commission under the Rajahs of Leadenhall Street!

The perusal of this memorial is well calculated to call forth feelings not

very favourable towards that IMPERIUM in IMPERIO which sits in conclave at home, and dooms its servants to sickness, poverty, and insult, on the swampy banks of the Ganges. Nothing can be more clear than the approaching "decline and fall" of our Indian empire, occasioned or accelerated, perhaps, as in other and more celebrated instances, by corruption or injustice at home!

XV.

ON THE MOTIONS AND SOUNDS OF THE HEART. By *D. J. Corrigan, M.D.*

WE take credit to ourselves for having been the very first who, in this country, drew the attention of the profession to the immortal discovery of Laennec, auscultation. That this should have been persecuted in the onset by the mob, is no matter of astonishment to those who know human nature, and remember that the savans of the day scouted Harvey and his doctrines. Those who would be wits and those who must be fools are always leagued in the holy war of antipathy to improvement, of hatred to innovation. The sneer, and the laugh, and the stubborn back of prejudice are ever turned against him who endeavours with honest enthusiasm to ameliorate the condition of the human race, or to strike a link from the fetters of ignorance. The men who persecuted the starry Galileo and they who jeered at Laennec and the stethoscope, differed only in opportunities, in casual circumstances, and in the fashion of their coats, for their minds were still the same, a heaven of stupid prejudice, ignorance, and enmity. Truth, however, is always an overmatch for bigotry at last, and the force of the truism was never more decisive than in the history of auscultation in this country. Where are the opposers now?

Echo answers, where!

All gone, all fled; or if a relic of the sacred Bæotian troop is to be found, it is skulking in private mansions, or the bye-parts of public institutions, where each, like Cato, gives his little senate laws.

We cannot but rejoice at this result of a contest where one party contended for truth and for science, the other for the prevalence of lazy and confident error. We should be more or less than men if we did not enjoy a triumph for which we have holpen to fight, if we did not exult in some degree when the eagle of victory flapped his wings upon our banners. No, we are delighted at the issue for the sake of the illustrious dead, for the profession, and for humanity. But we cannot avoid perceiving that the good is not unmingled, and that the consequences of the progress of auscultation will not be in the first instance solely beneficial. Pretenders will start up who will prostitute the stethoscope to their own vile ends, or who, knowing nothing of auscultation, will bring it into odium by their quackeries and blunders. That such will be the case we can plainly foresee, nay, we are sorry to confess that it has been so already. We are acquainted

with but too many instances of men, whose only pretensions to auscultation were consummate impudence and unmitigated assurance, pronounce with all the gravity in the world on pectoriloquy, ægophony, and so forth, when they knew not these sounds from the noise of a tin kettle or the braying of one of their own fraternity. The fact is that to turn auscultation to any account it is necessary to be well read in the works of Laennec, to be practically conversant with the ordinary symptoms of diseases, to have seen a fair share of actual cases, and to be accustomed to investigations in morbid anatomy. Unless a practitioner be thus prepared, we really would not recommend him to waste his time upon the stethoscope.

Another evil which is likely to attack the infancy of auscultation, is the mania of the present day for rushing into print. If a man applies a stethoscope half-a-dozen times he fancies he has made some marvellous discovery, and hastens, pleno ore, to communicate his mighty secrets to the public through the medium of some of our lively contemporaries. Is there no such thing as modesty in the world? Does a man suppose that with limited observations for a year or two he is called upon to question, or warranted in running a-muck at the opinions of those who have observed with care on an extended scale for a length of time? Really, common sense would seem to say, no! and yet the common practice is for every dabbler in the use of the stethoscope to doubt and dispute, on all occasions, the opinions of one who knew something about it, M. Laennec. God forbid that we should wish to gag the mouths of our brethren, that we should erect the opinions of any man into the authority of revelation, that we should assert M. Laennec to be infallible, or hold up his statements as never to be questioned. Did we broach such ultra-apostolical tenets, we should merit the bitterest sarcasms ever bestowed on the persecutors of Galileo, or the opponents of improvement. Such is not our aim, but we maintain that those who have hitherto had little experience should be slow to call in question the dicta of those who had much, because such a course will ever breed disorder, encourage error rather than elicit truth, puzzle the inquiring, confound the wavering, and be a by-word and a scorn in the mouths of the malignant. None can pay greater respect than we, to the observations of genuine talent and experience, none can entertain a more thorough contempt for the idle niaiseries of the pert jackanapes, or the pompous nothings of the crafty pulsee. With these remarks which are absolutely called for at the present moment we proceed to the memoir of Dr. Corrigan. When we see occasion we shall criticise freely, for the worse the sore the more bold should be the application of the caustic or the bistoury. The author commences with some very just remarks on the great improvement that has taken place of late years in the diagnosis of diseases of the chest.

“Our knowledge of the diseases of the heart, and lungs, has advanced within these late years, with a rapidity unparalleled in the history of medicine. For this we are indebted principally to the labours of Corvisart and Laennec. The light thrown by these writers on diseases of the heart and lungs, and the development by them of symptoms of whose existence there was not, before their time even a suspicion, have given to the physiology of these organs an increased interest; insomuch that inquiries, which previously might have been attended with little practical advantage, have now become absolutely necessary, and their results of the utmost consequence in enabling us to form correct diagnoses. In the

physiology of these organs, that of the heart stands foremost, its motions and sounds presenting perhaps the most remarkable phenomenon in the living body." 152.

It seems that Dr. Corrigan was hardy enough to publish a memoir on the *bruit de soufflet* in the *Lancet*, and, what is yet more worthy of admiration, he is sufficiently simple or confident to refer to it. We know not what Dr. Corrigan may think, nor do we particularly care, but this we will say, that such a mode of coming before the public is not calculated to win the ears of the respectable part of the profession, in England. The acquaintance of the costermongers of St. Giles is not a good passport to society in St. James's, and so such writers as Dr. Corrigan will discover. We have expressed our opinions on this subject with freedom, because we should consider the total suppression of our decided disapprobation, not to use a more harsh expression, as little less than reprehensible hypocrisy. But to business.

All men, be they physiologists or not, are aware that the heart, to use the phrase of our immortal bard, "knocks at the ribs," and most persons believe that the beat of the heart is synchronous with the pulse in the artery at the wrist. The explanation of this impulse of the heart against the side has always been a matter of some difficulty, but anatomists have universally agreed that it takes place during the contraction or systole of the ventricle. The generally received opinion is that which has been thought to emanate from Hunter, and is as follows :—

"The systole and diastole of the heart simply could not produce such an effect, nor could it have been produced, if it had thrown the blood into a straight tube in the direction of the axis of the left ventricle, as is the case with the ventricles of fish, and some other classes of animals, but by its throwing the blood into a curved tube, viz. the aorta, that artery at its curve endeavours to throw itself into a straight line to increase its capacity, but the aorta being the fixed point against the back, and the heart in some degree loose or pendulous, the influence of its own action is thrown upon itself, and it is tilted forward against the inside of the chest." 153.

We have always considered this explanation far-fetched, but our limits will not allow us to enter into physiological discussions at present, and we pass to the more practical points which are involved in the question. Dr. Corrigan objects to Hunter's explanation, and criticises also the opinions of Dr. Bostock* and Mr. Alderson "of Cambridge College,"† but without going into the grounds of his demurral, it is sufficient to say that they are partly satisfactory and partly not. But whilst we participated in the Doctor's repugnance to admit the accuracy of the foregoing explanations of a fact, we were somewhat startled at his positive denial of the fact itself, and his bold declaration, that the impulse and the ventricular contraction are not synchronous at all.

"All physiologists assert, that it is during the contraction of the ventricles, the heart strikes the side. The insufficiency of all explanations, and the errors of most, led me to think that there was probably some mistake in the premises on which all have argued. The first step therefore was, to ascertain whether the position universally assumed, was correct, namely, that it is during the systole of the ventricles the heart strikes the side.

* Bostock's *Physiology*, Vol. 3, p. 398.

† *Quarterly Journal of Science*, &c. Vol. 18, p. 223.

"The arteries being always full, and fluids being nearly incompressible, it follows that an impulse from the ventricle must be felt in the arterial branches, at the very instant of time of the contraction of the ventricle; that therefore, the pulse indicates precisely the moment of that contraction. The arterial pulse then being exactly synchronous with the contraction of the ventricle, and the striking of the heart against the side being, according to all physiologists, a consequence of that contraction, it follows that the arterial pulse should be felt a moment before the heart strikes the side, or that at the farthest, the impulse against the side, and the pulse, should be synchronous. Is it so? Or are they even synchronous? They are not. I know that my readers will be startled by this assertion, for all physiologists assert that they are; but let the reader before he discredits my assertion that they are *not*, but that the impulse of the heart against the side is anterior to the arterial pulse, place the index finger of his right hand on the point where his own heart beats most strongly, at the same time keeping the thumb or forefinger of the left upon the radial artery of his right hand. When his heart is beating slowly and forcibly, he will perceive distinctly that the first tap is against the ribs, the second from the pulse.

"The *second* tap indicates the precise moment of the contraction of the ventricle; the *first*, the heart's impulse against the side: the contraction of the ventricle is consequently posterior to the impulse of the heart. An effect cannot precede its cause; therefore, the contraction of the ventricle which follows, can not produce the heart's impulse, which has gone before. This experiment on the side and wrist was conclusive in my mind, that the contraction of the ventricles could not be the cause of the heart's impulse, and convinced me that the statements given by all physiologists of the heart's movements were erroneous, and that the position assumed by all, namely, that the heart strikes the side when the ventricles are contracting, was false. Some other cause of the heart's impulse was therefore to be sought." 167.

We like to give authors fair play, and therefore we will lay the whole of Dr. Corrigan's arguments before our readers, before we attempt urging any remarks of our own. The impulsion then and the dull sound attending it, are attributed by our author to the contraction of the auricles, and not to that of the ventricles, as all physiologists and Laennec have concluded. As confirmatory of this view Dr. Corrigan mentions a case in which the "*bruit de soufflet*," was distinctly anterior to the pulse. He had no doubt that this sound was produced by the rush of blood through a narrow opening into a wider cavity. As it was anterior to the pulse, and synchronous with the impulse, he concluded that the latter was owing to the contraction of the auricle, and that the bruit depended on narrowing of the auriculo-ventricular opening. On dissection it proved to be so. This is the case which is designed to immortalize the Doctor, and to which he refers with that feeling of proud satisfaction, that something which the world can neither give nor take away, experienced by heroes or martyrs on achieving a great or a glorious deed. However, our author fearing lest "he might have been too much carried away by his opinions," perhaps elated and dizzy at seeing himself blush in *Lancet* type in company with the XYZ's, and other ornaments of science that adorn that respectable magazine, determined, like Trajan, to associate others in the empire, who might ease his cares and share his glory. Doctor John C. Ferguson and Doctor Hunt, were the fortunate men selected on the occasion, and with our author constituted the triumvirs, chosen by kind Fate to decide the momentous question in abeyance. Their observations, like themselves, are of a triple nature, and consist, "for the sake of clearness," of first, the

experiments made—secondly, the facts observed and conclusions arrived at—and thirdly, a testing of the new views, by the litmus paper of pathology.

"Our first object was to examine the heart in the living animal. A rabbit was selected, and before proceeding with the experiment, the stethoscope was applied. Both sounds of the heart could be distinctly heard. The right side of the chest was opened, the mediastinum being left uninjured. Respiration went freely on, little blood was lost; and we obtained a view of the heart in action, far superior to what we could have anticipated. The animal lived in this state for about twenty minutes, sufficient time for accurate examination. Immediately after the operation, and when the heart was first brought into view, its motions were very rapid and tumultuous, but in a few moments they became less frequent, and more regular, and the movements of the different parts plainly distinguishable: first, the contraction of the auricles—second, the contraction of the ventricles—then, the pause. At each contraction of the auricles the heart came forward, the ventricles being dilated in every direction, and driven downwards and forwards; at each contraction of the ventricles the heart retired into the chest. The contractions of auricles and ventricles were quick; but it is impossible to describe the rapidity with which the contraction of the ventricle followed that of the auricle. When the heart was beating violently, their succession was so rapid, that the eye could scarcely distinguish between the two contractions." 169.

The experimenters could observe no such motion as the heart being tilted up against the ribs; but it first applied itself to the parietes of the chest by a small surface almost midway between the base and the apex which quickly increased in extent.

"The stethoscope was now placed on the left side of the sternum, and while one of us listened to the sounds of the heart's action, and tapped with his finger at each impulse and dull sound, the others marked by the sight the contractions of the heart. The tap indicating the impulse and dull sound, came after each pause, and synchronous with the contractions of the auricles, the ventricles being at the same instant dilated and propelled forward, the appendices of the auricles at the same time retiring.—Another now took the stethoscope; the experiment was conducted in the same way, and with a similar result. These experiments were repeated six times on rabbits, and again, on a larger animal, and invariably with the same results." 170.

The motions of the heart in warm-blooded animals under pain are so rapid as to occasion a difficulty in their analysis by the naked eye. The cold-blooded reptile, a frog for instance, is free from this inconvenience. The following criticisms on Dr. Bostock's assertions respecting the heart's action in this animal do not seem to us to be strictly just, but we give them as they are, with the observations grafted on them.

"Doctor Bostock, describing the motion of the heart in a cold blooded animal, uses the following words.—'For a short space of time the heart lies at rest, and suffers itself to be distended with blood, then it is suddenly seen to rise up on its basis, to shorten its fibres, and to expel its contents.*' We may observe first, that there is in this description, a contradiction both to his own assertions in another part of his work, and a refutation of his theory of the heart's impulse. Doctor Bostock makes in this description, the rising up of the heart anterior to the contraction of the ventricles. He says in another place, 'I may without impropriety assert, that the beating is felt *not* at the instant

* Bostock's Physiology, vol. i. p. 346.

when the ventricle *begins to contract*, but when the contraction has produced its effect in filling the arch of the aorta.' In the first quotation the heart according to Doctor Bostock, *first rises up, that is, beats, then expels its contents*; in the second passage the heart *first fills the arch of the aorta, that is, expels its contents, and then beats*. He asserts with Senac and Hunter, that the filling of the arch of the aorta by the contraction of the ventricle, is the cause of the heart's rising and giving an impulse; yet in the description just quoted, he makes the rising of the heart anterior to the filling of the arch. Doctor Bostock's description is, however, not only at variance with his own assertions and theory, but it is even quite erroneous in point of fact. This, the inspection of the heart in the living frog clearly showed. Having removed the inferior portion of the sternum, and thus brought the heart clearly into view, the following phenomena were observed. The heart did not suffer itself to be distended with blood, as Doctor Bostock states. The blood was thrown into it by the auricle contracting with great energy. It did not rise up on its basis; but was dilated and driven downwards and forwards by the blood expelled from the auricle: and finally, as the ventricle contracted, the heart retired from the surface, being deepest in the chest, at the moment when the contraction was at its utmost.

"The heart of a frog is very large, compared with the size of the animal; its movements are very slow, and its parietes although strong, are almost transparent. These circumstances, but above all, the transparency of the walls of the organ give the greatest certainty to observations on the actions of the heart in this animal; the presence or absence of blood in the ventricle being marked, not alone by the increase or decrease of size, but also in the most beautiful manner by the change of colour. The heart is quite pale when the ventricle is contracted or empty, a deep rich purple, when it is dilated or full of blood. This change of colour was an additional test of the accuracy of our observations, which we did not possess in warm blooded animals. When the auricle was distended it came fully into view; when it contracted, it did so with great energy, retiring quickly from our sight. At the same instant the ventricle swelling, being distended with blood (as shown by its sudden change from extreme paleness to a rich purple colour,) was impelled with some force against the finger. The contraction of the ventricle followed quickly upon its dilatation. It diminished itself in every direction, bringing its sides together, and its apex towards the base, and as it contracted, retired until its perfect paleness proved, that it had expelled all its blood; the heart at the moment, when the contraction was at its height, being deepest in the chest. Repetitions of this experiment confirmed our observations in every particular." 173.

Having thus concluded the detail of the experiments, we are presented with the facts ascertained, and they are these.

- "1mo. The auricles contract first.
- "2ndo. The ventricles, second.
- "3tio. Then the pause or state of rest.
- "4to. The contraction of the ventricles is rapid, and follows quick as can be conceived after that of the auricles.
- "5to. The contraction of the auricles is comparatively slow.
- "6to. The heart strikes the side, or, gives its impulse, when the auricles contract.
- "7mo. The heart retires from the side when the ventricles contract.
- "8vo. The beat of the heart is produced, not by a tilting up of the point of the organ as hitherto described, but by its swelling and coming against the ribs, in consequence of the impulse given by the rush of blood from the auricle." 173.

We now proceed to the stethoscopic portion of the investigation, the sounds produced by the heart's action. Laennec has announced that the first sound heard on applying the ear, which is synchronous with the im-

pulse against the side is that of the ventricle, the sound immediately succeeding the former, than which it is louder and clearer, is that of the auricle.—Such are the statements of Laennec, but if Dr. Corrigan be right in denying that the stroke against the chest is produced by the ventricle, Laennec's explanation of the nature of the sounds must fall to the ground of course.

"To ascertain the relation which the sound bears to the pulse, we selected from very extensive dispensary practice, those patients, who happened to have remarkably slow pulses. We also examined repeatedly and carefully the heart's action in the horse; which animal offered peculiar facilities for our purpose. The heart, when in health, beats only forty in the minute, and the sounds are distinct. Though perfectly satisfied in our own minds, with the result of these observations, still we looked for further evidence. Each of us selected, from among his friends not in the profession, a person on whose delicacy of ear and accuracy of observation he could rely. Of these, one was a gentleman who has been blind for some years, a man, however, of the highest mental powers. It is needless to remark, that, from this peculiar circumstance, loss of sight, his other senses have become extremely acute. The persons thus selected were carefully kept in ignorance of either our own views, or those entertained by others. After they had to their satisfaction distinguished the two sounds and the impulse, through the stethoscope, they were instructed to lay a hand on the pulse, and note the order in which each phenomenon seemed to them to occur.

"The opinions expressed by these persons were as follow.—'The impulse and dull sound came before the pulse. The dull sound had terminated when the pulse struck the finger. The short sound came exceedingly quick after the pulse. The first sound was long; the second short, not half the length of the first; and there was a short interval between the two sounds.' These observations, made by our non-medical friends, we hold to be peculiarly valuable; they are those of persons unprejudiced, made without a knowledge of any theory; they are the records of facts, the persons who recounted them not knowing for what purpose they were to be used. On the dull sound and impulse preceding the striking of the pulse, there was not amongst them even a hesitation; all declared at once that the impulse and dull sound preceded the pulse, and by a well marked interval.—On the termination of the dull sound there was a slight difference, one asserting it to have ended when the pulse struck the finger; *another supposing it and the pulse to finish together.* When the heart beat quickly, the dull sound and pulse seemed to terminate together; but in the horse, and in slowly beating hearts, the pulse terminated the long sound, as if with a blow, or, as the tap of a finger terminates the vibrations of a glass." 177.

Consequently Dr. Corrigan maintains that the first long sound is that of the contraction of the auricle and filling of the ventricle, which exactly reverses Laennec's statement and the commonly received opinion. In illustration of his opinions our author refers to the particulars of a case of contraction of the left auriculo-ventricular opening, but we think it affords him but sorry support, and by-and-bye we may advert to it again.

Again with respect to the second sound; Dr. Corrigan contents himself with saying that it cannot depend upon the auricle, for that contracts first. From an experiment which we have not room to detail, but which really appears to us inconclusive and objectionable in every respect, Dr. Corrigan was led to conclude, that it was produced by the contraction of the left ventricle and the impulsion and collision of the two opposite sides against each other. To be sure the best physiologists believe that the ventricle does not entirely empty itself, and that no such collision takes place, but Dr. Corrigan answers this "assumption" by saying that "it is totally unsupported by proof, contrary to reason, and directly contradicted by experiment."

Our author next applies the new lights to the *éclaircissement* of the diagnostic sounds produced by alterations of the heart. Laennec has laid down as a general law, that extent and loudness of sound without impulsion, are the signs of passive dilatation; impulse with little or no sound, those of simple hypertrophy of the ventricle; and a strong impulse and loud sound, the marks of hypertrophy and dilatation. Of the general accuracy of these signs no stethoscopical observer of disease of the heart can entertain a doubt, and accordingly Dr. Corrigan, feeling that to dispute them would be dangerous, endeavours to explain them on his own views. We must say that the attempt is but a scurvy one. There is one item which, if true, would upset the Doctor's auricular views, the co-existence of much impulsion with hypertrophy of the ventricle; for if the auricle produced the impulse, why should it be greater when the ventricle became hypertrophic? Dr. C. perceiving that disentanglement would be difficult, boldly cuts the knot by asserting, that increase of impulse is not a *constant* attendant on hypertrophic ventricles, and by insinuating that it is not a common one. In order to give the coup de grace to the overthrow of the unfortunate ventriculists, he cites the following case from Bertin.

"We shall give," writes the Doctor, "a case from Bertin, so satisfactory, as to convince the most sceptical, giving those parts of it which bear upon our subject, in his own words. The case is headed, '*Hypertrophy of the left auricle, of the interventricular septum, and of the columnæ carneæ of the right ventricle with dilatation of the left cavities, narrowing, or rather, disappearance of the cavity of the right ventricle, and ramolissement of the walls of the left, a little thickened towards the point.*'" After having given a lengthened detail of the usual symptoms of heart disease, with which it is unnecessary to trouble the reader, he adds, 'his pulse was full, free, and vibrating, (vibrant.) *The beatings of the heart were felt with violence over almost the whole chest.*'—Autopsy; the pericardium was very adherent to the heart, particularly on its anterior surface. The heart was very large, and rounded, presenting no appearance of its apex. *The left auricle was enormously dilated, and its walls had acquired a thickness of three lines.* The left ventricle had acquired a similar dilatation, and its cavity was so much increased, that it contained eight ounces of fluid; but *its walls were not thickened, unless at the inferior part and point.* They were soft and easily torn: the interventricular septum was more than an inch thick through its whole extent. Its tissue possessed no more consistence than the other parts of the walls. The right auricle was natural, but the right ventricle was *wasted*, and possessed, at most, not more than one-fifth of the volume of the left. The columnæ carneæ equalled the size of a writing pen, and were adherent to one another, occupying the cavity of the ventricle, so that during life, the blood could only filter through their meshes. The mitral valve was cartilaginous on its edges; the aortic valves were similarly affected in their middle." 196.

To this case Dr. Corrigan attaches much value, and so do we, but for a precisely opposite reason. The interventricular septum was an inch in thickness, the left ventricle was greatly dilated and hypertrophied at the inferior part and point, and the pericardium was adherent. If these pathological conditions were not sufficient to cause "the beatings of the heart to be felt with violence over almost the whole chest," even without the hypertrophy and dilatation of the left auricle, but more certainly with it, then will we renounce auscultation, forget our practical experience, and whistle our case-book down the stream for ever and for aye. Is not Dr. Corrigan

aware that adhesions of the pericardium will produce a most extensive and violent action of the heart, with little or no hypertrophy and dilatation of auricle or ventricle? We have witnessed many such cases, and so have all men of experience not warped and twisted by theory. So completely is this the fact, that physicians of eminence, unacquainted with auscultation, have looked on an extensive convulsion of the chest, with violent action of the heart, as the characteristic sign of adhesions of the pericardium; and if there have been a rheumatic history, they are right in nine cases out of ten. Unfortunately this is not the only instance in the present memoir, of Dr. Corrigan's displaying a large stock of theory and credulity, or both, and a small one of practical information.

"It may be said, are there not many cases related of hypertrophied and dilated ventricles with increased impulse, and without hypertrophied auricles? We are well aware of this, but we must take leave to doubt the accuracy of these reports. Nor is this to be wondered at, when we remember the material errors already pointed out in so accurate an observer as Laennec; when we reflect that the important part, which the auricles play in the actions of the heart, has never been pointed out until the present view—when we find that the auricles have engaged so little attention that Bertin and Laennec have not said one word by which to guide observers to judge of their hypertrophy, while they have been very minute on the relative proportions of the parietes of the ventricles. These writers have laid it down as an established fact, that increased impulse is invariably caused by hypertrophy of the ventricles. Their statement has been taken as true, and hence it has naturally arisen, that while attention was eagerly turned to the state of the ventricles, that of the auricles has been passed over as of little consequence." 199.

We agree with Dr. Corrigan, that sufficient attention has not been paid to the auricles, nay, we will go farther than he, and assert that the great mass of practitioners would not know a hypertrophied auricle if they saw it. There is a lamentable want of precise information on the subject of diseases of the heart, for we have frequently seen physicians, and of some repute, pronounce that a heart was "a little dilated," when the left-ventricle was hypertrophied to double its volume. Many men, indeed, can never perceive disease in the heart, unless it be actually converted into bone or positively as large as a bullock's. Show them a heart thick or thin, hypertrophied or flabby, and if the act be not too palpable and gross to allow the bye-standers to keep their countenances on the occasion, these gentlemen will say with much sang-froid, "Oh, it is healthy enough, it is a well-proportioned heart, for the size of the patient." We shall conclude by giving our author's own summary of his opinions.

"OF THE MOTIONS OF THE HEART.

- 1mo. The contraction of the auricles (comparatively slow,) takes place first.
- 2ndo. The contraction of the ventricles extremely rapid, follows quick as thought upon that of the auricles
- 3tio. The pause.
- 4to. The impulse of the heart against the side does not take place during the contraction of the ventricles, but in their dilatations.
- 5to. The impulse against the side is caused, not by the contraction of the ventricles, but by the contraction of the auricles, being dependant on the force with which the auricles send their blood into the ventricles.
- 6to. When the auricles contract, the ventricles are dilated, and the heart comes forward.
- 7me. When the ventricles contract, the heart retires.

OF THE SOUNDS.

1mo. The first sound is caused by the rush of blood from the auricles into the dilating ventricles; not by the contraction of the ventricles as hitherto taught.

2ndo. The second sound is caused, not by the contraction of the auricles, the falling back of the heart, or the action of the valves, but by the striking together of the internal surfaces of the ventricle.

OF THE RHYTHM.

1mo. The impulse and long sound come first, and are synchronous.

2ndo. The pulse.

3tio. The second or short sound." 201.

Having now given as full an account of Dr. Corrigan's paper as could be done without actually transferring it servilely from his page to our's, it only remains for us to offer a few remarks upon the doctrines it contains. Our readers, we are sure, will acquit us of prostrating our intellects before the dogmas of authority, or belonging to the ranks of those who worship only what Bentham has quaintly denominated "the wisdom of our ancestors." If we disagree then with Dr. Corrigan it is not merely because what he promulgates is new, but because we conscientiously believe that it is not true. The pivot on which all his doctrines turn is the question of the impulse of the heart against the side being consentaneous with the pulse or not. The profession have always believed that it is, Dr. Corrigan maintains that it is not, and one would think that on this point any one might satisfy himself. Since commencing the present review we have examined a considerable number of patients in a large hospital, and the result of our observations is in decided opposition to that of Dr. Corrigan's;—in fact, in the majority of cases the impulse was so synchronous with the pulse that neither we nor a demonstrator of anatomy who accompanied us could detect any want of accordance. In some few instances indeed the impulse and first sound were slightly anterior to the pulse at the wrist, but even here the interval was extremely minute and the pulse still seemed to be more in accordance with the first than the second sound. We have frequently remarked, and no doubt others have made the observation, that the pulse at the wrist has something approaching to a double beat, which confers upon it a vibratory character. What this may be owing to we do not know, but it is always when the first cardiac sound is long and the impulse more or less considerable. In this kind of pulse the second slight beat may indeed be thought to correspond with the second sound of the heart, and in point of time does so, but we question whether it be essentially connected with it. So much for the correspondence between the impulse and first sound with the pulse at the wrist, a correspondence which our senses appear to confirm.

Allowing, however, that the stroke against the side were a little anterior to the pulse, we do not conceive that the non-dependence of the one upon the other must necessarily follow. If the heart of a dog, yet palpitating, be placed upon a table, the apex is observed to be lifted up at each contraction of the empty ventricles.* Surely this action must be in some degree anterior to the complete or nearly complete expulsion of the contents of the

* Mayo's Physiology, 1st edit. p. 68.

ventricle, and surely also the pulse must feel the effect of the last drop of fluid expelled from the heart. Dr. Corrigan maintains, to suit his theory, that the ventricle empties itself completely, and he maintains with singular inconsistency, to suit his theory also, that the arterial pulse should even be felt a moment *before* the heart strikes the side; as if forsooth it were merely the first impulse communicated to the blood that is felt at the extremity of the system, whilst the ventricle goes on contracting to the uttermost without producing any further effect upon the pulse! In the observations of Dr. Corrigan's blind friend it is remarked "that the short (second) sound came exceedingly quick *after* the pulse, and his other acquaintance "supposed the *first sound and the pulse to terminate together!* Was there ever any thing so unfortunate for the Doctor! His very pupils trained with stethoscope and touch for the occasion, arise and propesy against him!

With regard to the experiment on the rabbit we can only say in the newspaper phraseology, it would be important if true. We do not mean to breathe a whisper against Dr. Corrigan's veracity, God forbid! But we know the fallacies of experiments, the slips of the human mind, and we likewise know that theory, like Love, is blind.

The last point requiring attention is the evidence afforded by pathology. Dr. Corrigan asserts that impulsion is not the guage of hypertrophy of the ventricle; we assert as a general rule, that it is, and that it no more indicates hypertrophy of the auricle than it helps to foretel an eclipse. We assert, and from experience, that the diagnosis of hypertrophy of the ventricle is generally very simple indeed, because it is almost invariably accompanied with a dull first sound, approaching even to the bruit de soufflet and increased impulsion. Who does not know a *cardiac pulse*, and who does not know that it is accompanied with the morbid impulsion and alteration of the first sound? Have men found hypertrophic auricles on these occasions? Alas, Dr. Corrigan, they have not. In our remarks we speak from what we have seen and from many cases, not from what we think, and from a few.

Dr. Corrigan refers to two cases of contraction of the left auriculo-ventricular opening attended with the bruit de soufflet as confirmatory of his views. He asks how could the first sound be attended with the *bruit* under such circumstances, if the ventricle produced it? Dr. Corrigan must surely be aware that there is such a thing as regurgitation of the blood, that all physiologists allow the ventricles to drive some blood back into the auricles in a state of health, and that in cases of rigid contraction of the auriculo-ventricular opening, where the valves can no longer close it effectually, such regurgitation must be still more likely to take place. If Dr. Corrigan is aware of these circumstances he will not press his question very closely, and if he was not we trust he will feel obliged to us for mentioning them. But farther than this, we assert that contraction of the left auriculo-ventricular opening is not necessarily attended with any bruit de soufflet whatever, nay, more, that in the majority of cases which we have witnessed it has been absent. For proof of this we refer to the last Number of this Journal in which we recorded five or six cases of this disease.

Our narrow limits compel us to bring these criticisms to a close, and we can only say that we have done more justice to our author than ourselves in the space we have allotted to the expression of his and our sentiments.

We have only to state in conclusion, that though quite accessible to conviction, it will require much more than Dr. Corrigan has yet adduced to shake our belief in our present opinions or diminish our scepticism respecting his.

XVI.

ON THE DISEASES AND INJURIES OF ARTERIES, WITH THE OPERATIONS REQUIRED FOR THEIR CURE; BEING THE SUBSTANCE OF THE LECTURES DELIVERED IN THE THEATRE OF THE ROYAL COLLEGE OF SURGEONS, IN THE SPRING OF 1829. By *G. J. Guthrie, F.R.S.* Professor of Anatomy and Surgery to the Royal College of Surgeons, &c. &c. 8vo. pp. 408. Burgess and Hill, London, 1830.

On the importance of the subject of aneurism and wounds of the great vessels of the human body, we need scarcely dwell. It is to surgery what fever is to physic, nay, more, it is almost its alpha and omega. On an intimate acquaintance with the physiology and pathology of the arteries depends the doctrine of inflammation, that essential dogma which has so long and so often convulsed the schools, which has raised to power, and shaken to their foundation the successive dynasties of Humorist and Solidist, the tyrannies, if we may use such an expression, of the great masters, of Boerhaave, of Cullen, and of Hunter. The surgeon who is acquainted with the nature of the diseases and accidents to which the arteries are liable will certainly prove a benefactor to humanity; the man who is not so and yet has the responsibility of such cases imposed on him in practice, is as certainly a curse. Who can peruse the serio-comic anecdotes in the works of John Bell, without feeling a shudder creep over his mirth at the satiric picture of an ignorant surgeon, so happily delineated by the powerful graver of that able man! Fortunately the objects of such satire are daily becoming more and more scarce, and the great body of the profession are possessed of a general degree of information on these topics which pleasingly contrasts with the ignorance of "sixty years since."

Mr. Guthrie's work is divided into two parts, not altogether unconnected, but yet in many points distinct. The first comprises the diseases of arteries, the second their injuries. The object of the former is, according to our author, "to demonstrate the value and importance of that portion of the pathological collection in the museum of the Royal College of Surgeons which relates to the subject of aneurism; and to prove that the labours and researches of Mr. Hunter anticipated nearly all the observations which have been made by his contemporaries and successors." In the latter Mr. G. has entered more fully into the consideration of the nature and treatment of wounds of arteries, and illustrated these points by observations and cases which occurred during the late war in Portugal, Spain, France, and the Netherlands. The matter contained in the volume has been for many years announced as preparing for the press, but although it has not hitherto appeared in print, it has been annually promulgated in our author's surgical lectures; and if delayed it has certainly not been withheld. Our narrow limits not permitting us to notice the whole, nor even the greater part, of the work in the present number, we shall pass at once to the sub-

ject of wounds and injuries of arteries, and reserve that of aneurism for another and early opportunity.

Mr. Guthrie commences with a remark of much value, though too often neglected by physiologists and surgeons, viz. that the analogy between wounds of the arteries in animals and in man, however specious, is not satisfactory; because neither are the consequences similar, nor is the reparative process adopted by nature the same. We all know with how much difficulty aneurism is produced in the lower animals, with how much facility it occurs in the human species. Nature is all powerful in arresting hæmorrhage in the former, but no judicious surgeon will trust to her efforts alone in the wounds of arteries in the latter; here art must come to the assistance of Nature in the most effective manner that the state of the case will permit. After noticing briefly but succinctly the phenomena observed to succeed the infliction of wounds on the arteries in man and other animals, and giving an abrége of the opinions of writers, on the steps pursued by Nature for the suppression of hæmorrhage, from Galen and Celsus down to Dr. Jones, Mr. Guthrie proceeds to deliver his own opinions.

"I must observe, in regard to the observations which follow, that they have been deduced from others made on man, suffering from different states of injury, which the opportunities offered to me during the Peninsular war allowed me to make on an extensive scale. Some points have been corroborated by experiments made on animals; and I shall here acknowledge my obligations to Mr. Sewell, of the Royal Veterinary College, and to Mr. F. Thomson, who undertook several of them, and gave themselves much trouble to ascertain the objects I had in view.

In the different theories I have noticed, and especially in that of Dr. Jones, it does not appear that the gentlemen who proposed or maintained them have ever conceived that there was a difference in the means employed by nature, according to the size of the artery injured or divided; that the difference of structure between an artery, such as the carotid or the inguinal and the tibial or the radial, could cause any deviation from the process they described as taking place, and as they presumed in one invariable manner in all arteries.—I shall venture however to say, that on the size and variation of structure of the artery, the process employed by nature essentially depends; that it is not the same in large, as in small arteries; and that it is not even quite the same in the upper and lower ends of the same artery.

An artery of moderate dimensions, such as the tibial or brachial, and particularly all below these in size, are in general capable by their own intrinsic powers of arresting the passage of the blood through them without any assistance from art, or from the surrounding parts in which they are situated. This overthrows at once the whole theory which relates to the sheath of the vessel and its offices, and in a great measure to the importance derived from the formation of an external coagulum." 223.

As it mostly happens that patients do not choose to bleed to death for the pure love of science, nor surgeons avoid restraining hæmorrhage on their own or their patients' accounts, so we seldom have an opportunity of seeing the processes of nature in human being, undisturbed by the interference of art. Mr. Guthrie, however, deems it odd ratiocination to bleed an animal until it dies, in order to determine how a bleeding was suppressed, which in point of fact was never suppressed at all.

"In my work on Gunshot Wounds, I have related the case of a soldier, who had his arm carried away by the bursting of a shell at the siege of Ciudad Rodrigo, and who was brought to me shortly afterwards. The axillary artery becoming brachial was torn across, and hung down lower than the other divided parts, and pulsated up to the very extremity.—Pressed and squeezed in every way between my fingers in order to make it bleed, it still resisted every attempt, although apparently by the narrowest possible barrier, which appeared to be at the end of the artery, and formed by its contraction. The canal was marked by a small red point, to which a very slight and thin layer of coagulum adhered, the removal of which had no influence on the resistance offered by the end of the artery to the passage of blood through it. In another case of a similar character, I cut off the end of the artery at less than an eighth of an inch from the extremity, when it bled with its usual vigour. In both, the vessel for that distance was contracted, so as to leave little or no canal at its orifice, and what there was, was filled by a pin-shaped coagulum." 224.

If in amputation at the wrist the radial or ulnar arteries be allowed to bleed until they cease to do so, the jet subsides into a stream, and the latter gradually diminishes until it ceases altogether; the extremity of the vessel being covered by a layer of coagulum of greater or less thickness. Some retraction of the artery must take place in such cases, but it cannot be fairly estimated. On examination after death or amputation the contraction of the vessel is evident, as well as the formation of a very slight external coagulum, extending into the canal of the artery. In these cases the sheath of the vessel can do nothing, for there is none; nor does any internal coagulum, strictly speaking, exist; nor in the instance of such moderate sized arteries does the diminished power of the circulation go for much. Although he has thus established the fact, that second-rate arteries in the extremities will cease to bleed, without the assistance of surrounding parts, Mr. Guthrie by no means intends to assert that they cannot and never do receive any; on the contrary, he is aware that in a great number of instances the reverse is the fact.

After remarking that the power of the heart over the circulation is egregiously over-rated, Mr. G. asserts without fear of contradiction, that when a large artery is fairly exposed and divided, a very slight degree of pressure perpendicular to its orifice is sufficient to suppress the hæmorrhage; and an equally moderate pressure on the sides of the artery will prevent the passage of any blood through it. If, however, the vessel be only half cut through, and in a situation inaccessible to slight but equable pressure, the hæmorrhage continues in spite of all attempts at its suppression. When the femoral artery is cut across in the upper part of the thigh, whether it be done by a cannon shot, musket ball, or knife, the patient does not always bleed to death, although frequently lost in consequence of the injury. If the division of the vessel take place in the middle or lower half of the thigh, the bleeding will probably cease of itself, and if it recurs it is more likely to proceed from the lower than the upper portion. Such are the statements of Mr. Guthrie, and no doubt they are founded on actual observation in the field. We doubt, however, whether surgeons in civil practice are generally of the same opinion, perhaps, as Mr. Guthrie has elsewhere remarked, because a little experience and more alarm, have conspired to persuade them, like the fat and fearful knight, of the reality of the terrors of their own conjuration. However this may be, it is evident that Mr. Guthrie looks upon these injuries without any degree of dread or consternation. At the battle of Toulouse, a large shot struck an officer in the thigh, and divided the artery about three inches below Poupart's ligament. Circumstances prevented immediate attention, and he died without any operation being performed. Desirous of seeing by what means the hæmorrhage "had been suppressed," our author carefully removed the artery, and found that its divided end was irregularly torn, and filled up by an external coagulum, which was slightly compressed at its inner end by a trifling contraction of the artery that served to keep it in its place. The rest of the coagulum filled the hollow in the sheath which the retraction of the artery had occasioned. "In this case," says Mr. G. "so unlike those I have hitherto noticed, the first natural cause giving rise to the suppression of the bleeding was the diminution of the power of the circulation; the second, the formation of a coagulum, formed in the hollow of the sheath left by the retraction of the artery. Contraction had done nothing." In a similar case, at the battle of Salamanca, the hæmorrhage stopped and did not return, but the patient died exhausted; no operation whatever was attempted, nor tourniquet applied. The artery, on examination, was in just the same state as the former, with the mere exception of the orifice being a little more contracted, and the external coagulum less in size, and projecting like a mamillary process. In other instances of a like description the appearances have more or less resembled the above; unless where the patients had died immediately, when the torn extremities of the artery have been quite open, with very little or no surrounding coagulum. It must be obvious to our readers that the persons whose cases have been related were similarly circumstanced to those of animals bled to death, and consequently the appearances resembled those observed by Dr. Jones in his experiments.

Mr. Guthrie has had many cases of injury of the femoral artery from smaller projectiles under his care. When the artery has been completely cut across in the *middle or lower part* of the thigh, the patient has either died without assistance, or the hæmorrhage has

ceased spontaneously. He has not met with an instance in which it has been necessary to tie the femoral artery after it had been divided and the hæmorrhage had ceased for the space of twelve hours, the efforts of nature being efficient to prevent its return. Mr. Guthrie has met with a considerable number of cases of gangrene of the extremity, or hæmorrhage from the lower end of the vessel requiring amputation, after wound of the femoral artery. Ten or eleven cases of this kind are detailed by Mr. G., but as many, if not most of them, have already been published in the 4th vol. of the Medical and Physical Journal, and as on several occasions we have drawn the attention of our readers to this point, we shall pass them over without any further comment.

"An artery of the size of the femoral at the *middle* or *lower* part of the thigh, retracts on being divided within its sheath; this retraction is also accompanied by a contraction of the orifice or extremity, which gradually assumes the shape of a Florence oil flask, or French claret bottle, in a similar manner to the contraction of the axillary artery, described page 224. I have not met with an instance so perfectly clear and decided of the femoral artery hanging out of a wound as in this case of the axillary artery, so as to demonstrate that the whole process is carried on in a similar manner. I have however seen the femoral artery at the lower part of a thigh, which had been struck by a cannon ball, so little supported by coagulum, and yet so much closed, as to lead to the belief, that in some instances the extremity of it may be closed by similar means, a conclusion which analogy would lead us to, if observation were wanting. In all successful cases, the retraction of the artery leaves a space occupied by a coagulum, which also in an artery of this size fills up the contracting opening, which is in a circular direction, just within the ragged edges, which when they exist do not themselves contract, because the continuity of fibre is wanting. The continued contraction of the artery expels the external coagulum, and this operation is assisted by the lymph effused from the cut edges and from the coats of the vessel; so that in a few days the whole of the coagulum is removed with the purulent discharge from the part; and the place it would occupy, the orifice of the artery, and the surrounding parts for at least an inch in extent, are filled up and covered by a yellowish green-coloured matter, very distinct in appearance from the neighbouring parts. On the examination of a wound after death or amputation, in which it was known that a great artery had been divided, I have always from this appearance pointed out the situation of the extremity of the artery.

The contraction of the divided end of the artery is confined in the first instance to its very extremity, so that the barrier opposing the flow of blood is formed by this part alone, as I proved by cutting it off in the case mentioned, page 224. This contraction goes on however increasing for the space of an inch, and the inside of this contracted inch of the vessel is filled up with an internal coagulum, which takes the shape of and adheres to the inside of the artery, rarely extending as far as a collateral branch, or under almost any circumstances beyond a couple of inches. Towards the extremity of the artery it adheres firmly, so as to form a real substantial obstacle to the flow of blood through it. The very orifice of the artery on the outside of this is covered by the yellowish green-coloured matter or lymph, which ultimately becomes organized. These processes are continued long after the wound is healed. The artery generally goes on diminishing and contracting up to its first large branch, so that of four or five inches, two or three will be impervious, the remaining part very much contracted, although perhaps still permeable by a probe. The accompanying nerve, where there is one, has just done the reverse, the cut extremity having become enlarged or bulbous, and gradually diminishing as it is traced upwards, until it becomes of its proper size." 248.

Mr. Guthrie observes, that it is a very curious and interesting fact, that the lower end of a divided artery is more prone to secondary hæmorrhage than the upper; so much so indeed, that when it occurs after having been arrested for a period of four hours, it takes place in all probability from the lower end. This may always be known by the darker colour of the blood, and by its *reelling* out in a continuous stream without any arterial im-

pulse. Mr. G. paid particular attention to this point during the war, and he is confident he cannot be mistaken as to the fact.

"The same kind of yellowish green matter marks and covers the situation of the lower extremity of the artery, as it does the upper; it is, however thinner where it immediately covers the end of the artery, which in none of these cases was contracted in the conical manner I have described as occurring in the upper extremity of the vessel. On the introduction of a probe into the artery with the greatest gentleness from below, it made its appearance at a point on the yellow space, raising a thin portion of it as it protruded. On laying open the artery, the orifice seemed to have been once closed by this layer of fibrine or lymph, but without a degree of contraction corresponding to that observable in the upper end of the same artery; the layer still forming an obstacle, sufficient to cover and close three-fourths of the orifice, the blood having flowed through the remaining fourth." 250.

These appearances seem to indicate a different process to that adopted for the closure of the upper end of the vessel, and their frequency to demonstrate that the process is a natural one. Two cases are detailed in illustration of the foregoing statements, and we shall briefly glance at the first.

Serjeant Lillie, æt. 32, was wounded in the thigh by a musket-ball, which described a track of seven inches, and was extracted behind on the field. He bled a good deal at the time, but restrained the hæmorrhage with his sash, and, for 19 days, the wound appeared to be going on extremely well, when on making a sudden turn in bed, dark-coloured blood flowed from both orifices of the wound in considerable quantity. Mr. Dease, in the absence of Mr. Guthrie, performed the operation for aneurism at the lower part of the upper third of the thigh; in 8 days the hæmorrhage returned, the limb was amputated, and the patient died. On examination, the artery was found to have been divided, where it passes between the tendinous expansion of the triceps and bone; the upper portion, divided by the shot, was closed; a probe introduced into it from above would not come out at the face of the wound, although the impulse given to the part on moving it was observable in the middle of a large yellowish green spot, where the vessel presented a claret-shaped contraction for about an inch, and an internal but small coagulum for nearly the same extent.—The lower or bleeding end of the artery was marked by a nearly similar spot; but, on passing a probe upwards from the popliteal space, it came out at a very small hole in the extremity of the artery in the centre of the spot. The canal of the vessel was not contracted or diminished, but only apparently closed by a layer of the yellowish green lymph laid over it, and adhering to its circumference.

When an artery is merely cut or torn, without being completely divided, it is just as if it had given way by ulceration. It can neither retract nor contract, but, if pressure be not accurately applied and maintained, it will bleed until the patient is destroyed. If the vessel is a small one, as the temporal artery, it must be cut across; if of larger dimensions, a ligature should be placed on it above and below the wound, between which it may or may not be divided, at the pleasure of the surgeon. This rule is so important that every tryo should learn it by heart. We now arrive at the section entitled—

ON THE METHODS OF PERFORMING ON WOUNDED ARTERIES.

Our author sets out with the just and important principle, that however applicable may be the Hunterian operation to cases of aneurism, and however brilliant its success in the treatment of that disease, it is totally inapplicable to wounded arteries. Surgeons for some time imagined that the same operation must answer in the one which had been followed by such splendid consequences in the other, and dazzled by the glory that surrounded the genius of Hunter, they misconstrued his views and perverted his principles. The error is now perceived and abandoned, but although the necessity of securing an artery of any size above and below the wound in its coats is now generally acknowledged, Mr. Guthrie contends that the *modus operandi* has been absurdly and unnecessarily retained. The examples of this mistake singled out by Mr. Guthrie are, the operation for wound of the poste-

rior tibial artery, of the axillary, and ulnar at its origin from the brachial. In operations for aneurism, the surgeon, in some measure, chooses his situation, and proceeds in a straight-forward manner, according to certain definite rules. In casual wounds of course it must be otherwise, but Mr. Guthrie contends that rules are still inflicted to clog and bewilder the younger surgeon. "The principal error," says our author, "in this method of proceeding, as adapted to wounded arteries, arises from a strange and unaccountable fear of cutting muscular fibres, which seems to have pervaded the minds of all the surgeons of the present day who have treated on these subjects."

Suppose, for instance, that the posterior tibial artery is wounded, and the surgeon determines to tie the vessel, he will be obliged, according to the usual mode of operating,* to raise the inner edge of the gastrocnemius muscle, to detach the inner head of the soleus from the tibia, to divide the deep-seated fascia on a director, and then to secure the vessel in a deep cavity, taking care to avoid the posterior tibial nerve. After noticing, in a very forcible manner, the acknowledged difficulties of this awkward operation, Mr. Guthrie proceeds to propose his own method of operating:—

"An incision is to be made six or seven inches in length, by successive and rapid incisions, through the integuments and muscles of the calf of the leg down to the fascia. The centre of the incision is to be on a line with the shot holes, or if they are diagonal to each other, between them; and it may be either directly in the middle of the calf, or a little to the side of, or directly over, the artery supposed to be wounded; it is not material which. The smoothness of the fascia points it out, and the loose cellular membrane connecting the divided muscles to it, allows of the edges of the long incision being easily separated, and to such a distance as to admit of the exposure of the great nerve, the arteries, and veins, in as distinct a manner as any other arteries, veins, and nerves, can be exposed in the human body. The tourniquet is now to be unscrewed, and the bleeding, if the wound did not bleed before, leads to the spot where the artery is injured. The knife may be applied perpendicularly to the fascia, and the artery laid bare for three or four inches in extent, by as common a piece of dissection as any ever practised, and nothing can interrupt the application of the ligature. The nerve and the fascia cease to be surgical bugbears, and the operation is as simple as any in surgery. No surgeon or anatomist will dispute this statement: he may however say, that the muscles have been divided, and that surgeons have not been in the habit of cutting through them by a fair incision in their length; that they have hitherto only done it by insinuating a director under the head of the soleus, and separating it from its attachment to the bone; as if the separation of a muscle from its bony attachment was not much more likely to lead to weakness and defect in the action of that muscle, than a mere interstitial incision in a longitudinal direction. There is no anatomist who will deny that it is so." 261.

In order to prove that a muscle may be cut across, whenever it may be desirable to do so in order to place a ligature upon an artery, and that little or no inconvenience is the consequence, Mr. Guthrie relates the case of Lieutenant Colonel Wildman, in whom the deltoid was completely divided by a sabre-cut. By raising the arm to a right angle with the body, and bringing the sides of the wound together with compress and bandage, granulations sprung up, and the officer's recovery was so perfect, that he is now unconscious of any defect in strength and motion. In a French soldier, also, the lower and fore-edge of the pectoralis major was completely cut across, and yet merely a little weakness, of no consequence was left. In accordance with these facts and the principles already brought forward, Mr. Guthrie criticises sharply the operation, as laid down in Harrison, of trying the axillary below the clavicle, for wound of the artery through the pectoralis muscle. He also animadverts on a case related in Mr. C. Bell's Commentary on John Bell's Surgery, in which this operation was performed unsuccessfully for secondary hæmorrhage from the axillary, after the arm had been torn off by machinery. The artery, when wounded,

* For an account of this operation, see Harrison on the Arteries.

should always be secured at the spot, and, if necessary, the pectoralis major muscle should be divided, taking the hole or cut as the centre of the incision.

Mr. Guthrie next passes on to the manner of securing the ulnar artery when wounded a little below its origin, and whilst covered by the pronator teres, &c. In Mr. Harrison's work it is stated that, at this point, a ligature of the artery "would be impracticable," but Mr. Guthrie tauntingly remarks, that it would only be so because it is so considered. The surgeon should make a clean incision down to the artery through all the muscular fibres that cover it, avoiding the median nerve as it runs between the two origins of the pronator teres, and then he should place a ligature above and another below the wound in the artery. "when there would be nothing more to do." Mr. Guthrie has seen these parts divided, and he has divided them himself, and the patient has recovered without any sensible defect. In a case at the battle of Vimiera, in which the ulnar artery was wounded, Mr. G. cut down upon the vessel, which he found more than half divided, and tied it above and below the wound. The patient was cured. Before continuing the thread of our analysis, we may observe that Mr. Guthrie has proved, that the mere division of muscular fibres is far from being an insuperable objection to an operation. The only question appears to be, the facility in all cases of performing it. Suppose, for instance, a wound of the ulnar artery near its origin, with great extravasation of blood into the neighbouring parts; in such a case, it would be difficult to find and secure the bleeding vessel, buried, as it is, under layers of muscle and a mass of blood. The same may be said of wound of the posterior tibial artery; but, as Mr. Guthrie has had a practical experience in these operations which others have not, his opinion is entitled to more weight than theirs. We would not be understood as quarrelling with the principle inculcated, of tying both ends of a wounded vessel in every practicable case; on the contrary, it is one to which we yield our undivided assent, and to which we would most earnestly direct the attention of our readers.

Connected with this subject our author adverts to, and keenly animadvert on, a memoir published by M. Dupuytren, in the *Repertoire General d'Anatomie et de Physiologie*, &c. tome v. 1828, entitled—"Sur les Anévrysmes qui compliquent les Fractures et les Plaies d'Armes-à-Feu, et sur leur Traitement par la Ligature, pratiquée suivant la Méthode d'Anel."

After alluding to some cases by Petit, Pelletan, M. Delpech and himself, M. Dupuytren proceeds to relate, at some length, the case of M. de Gambaud, a captain of cavalry, who received a wound from a horse-pistol bullet, which entered the upper part of the right leg, from the front backwards and from the outside inwards, passing between the tibia and the fibula, which latter it slightly injured. Violent bleeding immediately ensued, which was stopped by compress and bandage, although the limb became swollen and very painful.—An aneurismal tumour formed, the pulsations of which were at first arrested by the pressure of a tourniquet and pad on the femoral artery, but they soon returned, and, on the thirteenth day, hæmorrhage took place from the wound. The bleeding returned from day to day, and M. Dupuytren was called into consultation with Messrs. Aumont and Dessien.—The foot and leg were of a violet colour, swollen, cold and numb, and uncertain whether the anterior or posterior tibial artery, or the peroneal or popliteal, or several of them at the same time, were divided, M. Dupuytren tied the femoral artery. Inflammation was moderate; on the twentieth day the ligature on the femoral artery came away, and, in six weeks, all the wounds were completely healed.

"Ought we to attribute," says M. Dupuytren, "the success of this operation to the accidental occurrence of fortunate circumstances? or ought we look upon it as the natural and necessary consequence of the principal acted upon, in placing a ligature on the femoral artery? and should such a method of proceeding be established as a precept in surgery? To answer these questions, allow me again to mention, that this method of treating simple aneurisms always stops the pulsation of the tumour; and even when employed against aneurism complicated with fracture has been very successful; and, finally, that this method, which M. Delpech and myself first practised nearly at the same time, in cases of hæmorrhage following amputation, has invariably been attended with success. From these results I think it evident, that the success of the present operation was not dependent upon any fortuitous occurrence; but on the contrary was the natural consequence of the prac-

tice pursued. The ligature, in suspending the course of the blood in a divided vessel, the solution of continuity of which had caused an external and internal bleeding, gave time and means to the inflammation to cicatrize the wound in the vessel, and to render the cut extremities impermeable to the blood which the anastomosing branches might bring to them.

To judge by analogy, this obliteration ought to be more easy and more certain after gunshot wounds than any other.

One of their most remarkable effects being to contract (*froncer*) the orifices of the vessel, to concreate or coagulate the blood contained in their extremities, and to render them impervious.

Without therefore wishing to elevate this single fact into a principle, I do not hesitate to consider the success obtained in this case of M. de Gambaud as the forerunner of other similar fortunate results.

Many other reflections occur to me, but I hasten to a conclusion, drawing attention to the two principal points of the memoir. First, the rupture of the principal artery of a limb, occasioned by a fracture, and followed by an extravasation of arterial blood round the broken bone. Secondly, the rupture of the principal artery of a limb caused by a musket ball, followed by an extravasation of arterial blood, having in both cases the character of an aneurismal tumour. This complication of injuries, either of which alone would be serious, had never till now been cured but by amputation.

The ligature of the principal artery of the limb, made at some distance from the wound, and between it and the heart, will I believe prevent the necessity of this cruel mutilation.” 282.

Previous to making any comments on the preceding case and observations, Mr. Guthrie details the particulars of seven cases of wounded artery. We shall give a skeleton account of them. In the 1st the anterior tibial artery was wounded by a ball on the 16th of May.—On the 15th of June secondary hemorrhage, for which the femoral artery was tied. Hemorrhage again took place on the 5th, 6th, and 27th of July—the limb was amputated, and the patient died. The muscles on the back of the leg were nearly gangrenous.

In the second case the wound was in the calf—secondary hemorrhage eight days afterwards by injection of the limb—femoral artery tied—hemorrhage again—amputation—death. The posterior tibial had been injured and sloughed.

In case 3, musket-ball passed through the thigh—aneurismal swelling—usual operation—matter collected in the thigh and a counter opening was made from which there was hemorrhage, which was arrested by pressure, returned, and amputation was performed.—Patient died. The artery had not been wounded in the first instance, but become involved in the disease of the neighboring parts.

In case 4, musket-ball entered a little in front of the left trochanter major, between the rectus and vastus externus, struck and flattened the os femoris, passed underneath the anterior edge of the glutei and along the ilium for three inches, and lodged in the posterior part of the belly of the glutæus maximus, from whence it was cut out next day. Much blood was lost at the time—on the 15th day violent hemorrhage from the wound, which on the employment of pressure, continued going on internally, and produced an aneurismal swelling—on the 18th day another profuse hemorrhage—incisions made to enlarge the wound, blood sponged out, two large branches of the gluteal artery tied at each extremity by the needle, and a large vessel close upon the bone which had furnished the bleedings treated in the same manner. The patient nearly sunk from exhaustion during the operation, and died the next day. No adhesion of the parts had taken place.

In case 5, a musket-ball broke both bones of the left leg—incisions were necessary—erysipelas and hospital gangrene followed—about a month after the injury hemorrhage from a spot two inches and a half above the ankle-joint. The anterior tibial was tied an inch and a half above the bleeding part, and all did well.

In case 6, a musket-ball wounded the left femoral artery a little below Poupart's ligament—on the 11th day slough separated from the wound with frightful hemorrhage. The external iliac was immediately tied with two ligatures and divided between them. Rigors, pain in the chest, and subsequently typhoid symptoms succeeded, but no return of bleeding; six days after the operation he died.

In case 7, a musket-ball entered the right leg in such a direction as to make it evident that it must have passed close to the posterior tibial and peroneal arteries, but no immediate hemorrhage ensued—thirteen days after the accident a considerable hemorrhage suppressed by the tourniquet, but shewing a constant disposition to recur. Next morning the limb was injected with blood, florid blood issued from both openings, and on passing the finger into the outer one a sort of aneurismal tumour could be felt, on pressing which against the fibula the hemorrhage ceased, indicating that the peroneal artery was in all probability the only vessel wounded. Mr. Guthrie cut down through the calf of the leg, found the parts in all states between sphacelus and perfect health, and after being obliged to make a transverse incision in addition to the longitudinal one of seven inches in length, succeeded in securing the vessel, but not separately, with a needle. The hemorrhage never returned, kindly suppuration took place, and in three months the wound was entirely healed. The patient is now in the York Hospital at Chelsea, and walks without appearing lame, although he cannot do so for any great distance. Having given the foregoing cases, which we have materially bridged, Mr. Guthrie proceeds to criticise the opinions of Baron Dupuytren, as appended to the case of M. de Gambaud.

“In the remarks which I am going to make on the memoir and opinions of M. Dupuytren, I hope that I shall not deviate from that respect which is due to a foreigner and a gentleman of high and deserved reputation. M. Dupuytren is pleased to entitle his operation after the method of Anel, although it was not done according to the method of Anel, but after that of Hunter; neither did Anel ever do an operation in the same place, or on the same principle. If the Baron had shown himself to be thoroughly acquainted with the principles that directed Mr. Hunter in the performance of his operation, I should have thought that the omission of his name might have arisen from a jealousy of his posthumous fame, unworthy of the elevated rank which M. Dupuytren himself holds in the profession; but it clearly arises from inattention to the principles laid down by Mr. Hunter and his successors, and to the difference which really exists between these operations.

It is also very extraordinary the Baron should say, as he does, page 22, that he had consulted in vain both ancient and modern authors on this subject, when the first and seventh of the cases I have given above were published, with several others nearly similar, in Paris, nine years before his memoir appeared, by Breschet in his translation of Mr. Hodgson's work on the Diseases of Arteries and Veins. It is nevertheless very satisfactory that it should be so, because it shows that the practice which M. Dupuytren recommends to the French surgeons in 1823 as worthy of their adoption, had been tried in the British army in 1810 and 1812, and proved to be ineffectual, and to be founded on erroneous principles; whilst, in 1813, the true method of proceeding had been demonstrated by the same surgeons, and established on safe and scientific principles.” 301.

This may be an unpalatable dose for the able Baron: but it is one which the state of his case most imperatively demands. He on all occasions evinces either an extraordinary ignorance, or an overweening contempt, of English surgery and English surgeons, a trait which, however it may flatter the reputed vanity of himself and his nation, lays him open to ridicule and bares his side to criticism. What can be more absurd than the omission of the name of John Hunter, in connexion with aneurism and operations on the arteries? What can be more foolish than the attempt to pluck the laurels that time has immovably carved upon his bust, in order to deck the brows of Mr. Anel! The attempt is alike unsuccessful and pitiful, and only redounds to the disgrace and confusion of him who makes it. M. Dupuytren would appear to be like Horace, on his mistress' mention of his rival's rosy neck:—

—Væ meum
Fervens difficili bile tumet jecur!

It gives us pain to allude in such terms to a surgeon of eminence and merit as M. Dupuytren confessedly is, but when our country is tacitly decried, and her great men robbed of their due, it becomes us to stand forward and maintain their rights. We would willingly believe that the spirit too frequently displayed by M. Dupuytren is not shared by the more liberal portion of his countrymen. But to revert from the man to his doctrines,

Mr. Guthrie proceeds to observe, that the last passage in M. Dupuytren's comments cannot be admitted as a correct statement of the effects of a gunshot wound on arteries.

"I have shewn in the preceding observations, pages 231 et seq. what is the real effect of a ball on the extremity of a divided artery, and that the appearances depend very much on the size and structure of the vessel. In what manner a ball can contract (*froncer*) the orifices of an artery has never been shewn, neither can it be easily understood; inasmuch as the act of contracting must be a vital act dependent on the powers of the artery itself. If it be a mechanical act, arising from injury, it must be a contusion; and this surely cannot be advanced as a process likely to consolidate the end of the vessel; it being now well known and admitted in England, that the first and most simple state of adhesive inflammation is the best calculated for the permanent closure of a divided artery." 203.

A torn, divided, or injured artery may suffer several different kinds of lesion; first, it may be only injured but not opened into; secondly, partly or entirely divided by a musket-ball; thirdly, it and the surrounding parts may be torn and contused by a cannon-shot. Thus, in reference to the first point the elasticity of arteries enables them to yield to an opposing force without laceration, and to suffer a considerable degree of contusion without sloughing. In the case of Captain Flack, several inches of the femoral artery were laid bare by a cannon shot, but it became covered by granulations, and maintained its functions unimpaired. If, however, the injury be considerable, a part or the whole of the circumference of the artery may ulcerate or slough.

If again an artery be completely divided, the appearances described by Mr. Guthrie in the commencement of this article will be observed. If only a part be torn, cut into, or slough, the patient will generally bleed to death, unless assistance be obtained; the musket or other ball having no effect on the walls of the artery different from any other instrument. Where a part of the vessel remains uncut, the opening made by the sword or ball, if small, becomes round from the unequal contraction of the artery. If the vessel be merely slit up the sides of the opening will come in contact, so as not to be very perceptible if the artery be compressed above, and no blood be allowed to pass through it. In such cases of imperfect division the only proper operation is to tie the vessel above and below.

When, in the third place, a cannon shot strikes a limb and bruises it most severely without carrying away any part, the great artery may not only be ruptured in one spot, but its internal coat may be injured in several. In one case related by Mr. Guthrie, the posterior tibial and fibular arteries were torn across, and the popliteal was closed by coagulable lymph thrown out from a rupture of the internal coat at this part. If an artery be wounded in man by a sharp cutting instrument, to the extent of one-fourth of its circumference, or even less, Mr. Guthrie believes that the process of cure always takes place through inflammation, and by obliteration of that part of the canal of the vessel. In proof of this he mentions a case of pike-wound in the direction of the brachial artery, after which no pulse could be felt for some time at the wrist, and the pulsation of the brachial below the wound continues imperfect.

"I consider myself then warranted in saying, first, that when an artery is injured by a ball, but not torn or bruised to such an extent as to destroy the continuity of the vessel, inflammation is the only result; secondly, that when the artery is cut or divided, the processes I have described take place; thirdly, that in some cases, particularly where the injury is inflicted by cannon shot, the internal coat may be torn in one or more places above the part where it is divided, constituting a barrier to the flow of blood from the part; but it must be recollected that this barrier is formed at a very early period. I much doubt whether blood would pass through such an artery: I am sure that it would not do so twenty-four hours after the injury. The impulse or power of the heart or circulation is as nothing when the inner coat of an artery is injured, and has inflamed so as to throw out coagulable lymph. It invariably arrests the circulation and obliterates the artery.

In all cases in which an artery is seen pulsating on the surface or other part of a wound, the obstacle to the bleeding is found to exist in the very extremity of the vessel: let only one-sixteenth part of an inch be cut off, and the blood immediately darts forth. I have

done this fifty times at least, and it is precisely the same from whatever cause the injury is inflicted.

A divided or cut artery, in a case of wound by a musket ball, is not in a more favourable state for healing without hemorrhage than from any other wound. In regard to the other observations of M. Dupuytren, that a gun-shot wound has the remarkable property of concreting and coagulating the blood in their extremities, in a greater degree than any other wound, it is contrary to every fact I am acquainted with in regard to large arteries. The theory then which he would build on these opinions is untenable. If the wound had such an effect on the artery, why did it bleed at first? why did it continue to do so afterwards? I have shown that the lower end of the artery is more likely to bleed than the upper, and that hemorrhage does not always depend on the impulse of the circulation. It is certainly true that if the blood can be prevented from passing into the divided vessel, there will be a greater chance of the natural process of inflammation and granulation, which are taking place in and around it, closing it up, than if the blood be allowed to flow through it. But it is only then a chance. It is impossible to calculate the time which nature may require to bring the blood by the collateral vessels into either the upper or lower end of the vessel; it may occur immediately; it may not do so for hours or for days; and on the speculation that it may not do so, the first hope of safety depends; the second, on the further accidental circumstance, that the end of the artery may be closed in the interval. Surely this cannot be considered a scientific operation, and fit to be erected into a precept in surgery, which depends on two accidental circumstances, neither of which can in the slightest degree be calculated upon.

There are many other reasons why the operation was a bad one in this case, and always will be a bad one in all similar cases. The patient was made to undergo the chance of mortification of the extremity, which it is probable would have taken place, if the operation had not been delayed until some days after the first hemorrhage occurred from the wound; which did not take place until the thirteenth day, during which time the inflammation in the limb had given the collateral vessels a disposition to enlarge. The wound itself was not treated as the principles of surgery require. A quantity of decomposed blood was pent up under and between the muscles of the calf of the leg, together with some of the patient's clothes, and some spiculae of bone. Surely in a case like this, but without further fear of hemorrhage, the Baron would have enlarged the wound, cleared away the clots of blood, and have placed it in a simple state. There cannot be a doubt on the subject, and the operation of making an incision through the muscles of the calf of the leg would have enabled him to do all this, and to have secured the vessels, if there had been even four bleeding extremities, without any difficulty or danger.

The Baron Dupuytren applied Mr. Hunter's theory of the operation for aneurism to the treatment of a wounded artery, and succeeded by chance; others have done the same long before him; but nothing which is dependent on chance or accident can ever become a principle in surgery." 310.

The theory, observes Mr. G. is not always applicable even when the wounded artery forms an aneurism, because the whole limb is not in the same state as one which has gradually become aneurismal from disease. A man, aged 24, was wounded in the thigh on the 18th of June, and lost much blood. The wound healed, but an aneurism formed and extended to within an inch of Pourpart's ligament. On the 28th of August staff-surgeon Collier tied the external iliac artery, in the manner recommended by Sir Astley Cooper.—The temperature of the limb shewed a great disposition to sink, discoloured patches appeared upon its surface, and pain in the abdomen with inflammation of the wound succeeded. The patient was bled at three times to 36 ounces, the limb turned lived and vesicated, and on the 1st of September the patient died. On dissection there was slight peritoneal inflammation, and the whole limb was in a state of gangrene. The operator, says Mr. Guthrie, should either have cut into the sac and performed the old operation, or he should have tied the artery immediately above it. More anastomotic branches would thus have been saved, and mortification probably averted.

When a deep seated branch of an artery is wounded and continues to bleed, considerable difficulty often arises as to the best method of proceeding; because it is possibly an uncertain branch, and the facility of anastomosis must be taken into account. It is not good

practice to cut down upon an artery on the first hæmorrhage, unless the main trunk be wounded: for many a bleeding supposed to come from the great vessel, has been permanently stopped by a moderately continued pressure in the course of the vessel, sometimes combined with pressure on the bleeding part itself. If, however, this be insufficient, Mr. G. would introduce his finger into the wound, and enlarge it until he could see to the bottom or the bleeding part, when he would tie the two extremities of the vessel.

Hæmorrhage may take place from an artery which cannot be tied at the part where it is wounded, as in the throat; and the question of placing a ligature on the main trunk comes under consideration. Mr. Guthrie details a case, in which both carotid arteries were wounded by pins, purposely introduced on a cork, which stuck in, and produced ulceration of the œsophagus. He also relates a case which occurred to staff-surgeon Collier, in which a spear wound at the angle of the jaw, was followed by secondary hæmorrhage, and the common carotid artery on the same side was tied with success. He then adverts to the cases of Mr. Luke and Mr. Mayo, in which the same operation was successfully performed, for hæmorrhage in consequence of ulceration of the throat.* Our author was summoned to see a gentleman who had cut his throat very deeply, having laid bare the left carotid artery, and wounded the left internal jugular vein. The opening in the latter was distinct, and Mr. Guthrie ripped up the edges and included them in a knot, without destroying the continuity of the vessel. The carotid appeared to be wounded as deeply as its inner coat, but no deeper. On the eighth day secondary hæmorrhage took place from the artery, and Mr. Guthrie tied it below, and the external carotid above the wound; the bleeding ceased, but the patient died next day. The internal jugular was found pervious, and the internal carotid had a soft coagulum of blood for about a quarter of an inch. In a similar case Mr. Guthrie, warned by this, would place a ligature above and below the injury to the outer coat of the vessel.

In all cases of hæmorrhage from the throat, which cannot be suppressed without tying the carotid artery, Mr. G. would tie the external, as being nearer the bleeding branch. If this fails, he would tie the internal or common carotid also.

In bleeding wounds of the hand or foot, dilate the wound and tie the vessel, or if this is impracticable or unsuccessful, compress the principal trunks and the wound itself. The ulnar artery in the palm should always be tied when wounded, for the deeper seated radial, compression should be tried. If this be not allowed by the swelling of the hand, first tie the radial, then the ulnar, and if these operations fail, a clean and decided incision is to be made in the line of the wound, from the annular ligament to the finger (avoiding the flexor tendons,) and down to the metacarpal bone, which bone, and the finger is, if necessary, to be removed; by which space will be obtained to see the bleeding vessels. The hand or foot should only be amputated as the very last resource. Such are the rules laid down by Mr. Guthrie in cases of wounds of the hand or foot. Some very good remarks are offered on wound of the brachial artery in bleeding, and then the precepts already inculcated in different parts of this article are summed up together, in the form of 24 aphorisms or "conclusions." We wish we had space for their insertion. A chapter on aneurism by anastomosis, and one on the mode of performing the various operations on the arteries, conclude this valuable work.

Here we must end, not for want of matter, but deficiency of room. After the copious account we have given of a portion of Mr. Guthrie's book, it would be a work of supererogation to say that we think it deserving of very attentive perusal. Surgeons will derive much information and correct principles from studying its contents, which we recommend all to do. In our next Number we shall analyze that portion which treats of the diseases of arteries.

* We have given a full account of these and other cases in the *Periscope* of the present Number, p. 260, et seq.

Periscope ;

OR,

CIRCUMSPECTIVE REVIEW.

"Ore trahit quodcunque potest, atque addit acervo."

I.

DR. KENNEDY ON LIFE AND MIND.*

Zoonomy may be accounted the science of *living things*—vegetables, animals, man, and of their distinctive attributes—organization, vitality, and mind.

Organization implies life; and, in animals, is associated with mind. Physiologists give the term a two-fold signification. Under the first, it expresses the *act* of eliciting appropriate particles from the substances of nutrition, and applying them to their destined ends—the formation, sustenance, renewal and propagation of living structure; under the second, it denotes the *state* of such particles, so formed and applied as to constitute an organ or living instrument, by the composition of its elementary principles. Hence, as an *effective process*, it imports the separation of organizable atoms or essences from the blood by means of a secreting function, and of ultimately adapting them to their determinate uses through the instrumentality of vital absorption: and, as a *constituent state*, it has reference to the circumstances of animal texture thus constructed. Organization, therefore, implies the aggregate of those qualities which dis-

tinguish the living from inanimate formations.

Vitality is the *action* of life co-efficient with organic instruments. Life forms a constituent element in every organized thing that executes motion: it is itself a substantial entity, an operative principle exercising positive agency, causing manifest effects from which its substantiality is deducible: it is, indeed, the source of all organic *action* and was communicated, in the beginning, by the creative inspiration of the Almighty: its operative manifestations are perceptible; but, as with the elemental principles of light and caloric, philosophers are utterly ignorant of its nature and essence: the divine oracles have not revealed these, and hitherto they have eluded observation as well as scientific research. That incomprehensible principle, then, which was thus imparted to the first of all animate beings, and to the first of the human kind, and made communicable through the processes of reproduction, to the latest born of every race; that principle which gives to vegetables the power of converting the elements of inert matter into organized structures; that principle which, in animals, by the unceasing agency of its own peculiar vehicle—*arterial blood*—transmits to every organic texture the germs of its essential and vital attributes, is *LIFE*: the equal tenour of the operations of life, maintains health; their derangement originates disease, by the fatal ascendancy of which, *whatever lives* is doomed to languish, to sicken, and to die.

Arterial blood is an instrument or vehicle only: it transmits or imparts, but is *not*, the principle of life: it is the diffusive source of organization, vitality, and mind: it per-

* Extracted from an "Introductory Lecture delivered at a meeting of the members of the Warwick and Leamington Literary and Scientific Institution, holden at the Lecture-room, Warwick, June 8th, 1829, by James M. S. Kennedy, M. D., of Ashby-de-la-Zouch."

vades and invigorates every portion of the living machine; furnishes to each new being all the material and mental elements which the animal organization originally comprehended, and by which it is perpetually sustained. From this blood the *nervous*, as well as all other structures, is primarily elaborated; and this structure, in being made the organic depository and instrument of mind, has been qualified to discharge the exquisite office of manifesting the innumerable modifications of feeling, sentiment, and intelligence. Hence it is, that arterial blood, as a communicative instrument, gives, and upholds, and repairs the essential and vital elements of animals; and nervous structure, as an instrument also, supplies unceasingly their active and sentient energies.

Philosophy and revelation represent man as a superlative being, in whom the qualities of a mortal nature are associated with the attributes of immortality. This pre-eminence of constitution is innate, and forms his distinguishing character: it results from his possession of organization and life connected, by inexplicable ties, with a transcendancy of mental endowment: and, as it contributes essentially to the vigour and dignity of his progressive states, it exercises important influences on the circumstances of his ultimate destiny. In accordance, therefore, with the benevolence of divine wisdom and power, the Creator has furnished him with organs, adapted in all respects to the complete discharge of those vital and mental functions, on which the integrity and transmission of his exquisite economy depend. Nevertheless, in being exposed to sustain impressions from the manifold and ever-varying agents which tend incessantly to change the modifications of existence throughout the universe, the human fabric carries, in each of its systems, the elements of health in conjunction with a liability to disease.

Man was *one*, at the beginning; and, from the primogenial sire, have sprung every individual, tribe, and nation, in every region of the habitable world. He was created perfect in all his endowments; and, by this provision, was made capable of performing,

intuitively and without experience, the admirable functions of life, sense and intelligence. Organization, therefore, and life and mind arose originally a matured constructure, elaborated by the Creator's plastic hand; and, thenceforward, have been maintained and transmitted by the vital actions of organs.

Mind is propagated by the same genial act which renews the origins of organic structure and life: it implies the co-existence and co-operation of its own, with the organic and vital attributes, and thus constitutes the characteristic distinction whereby the animal surpasses in power and dignity, every other modification of nature. This doctrine of the elements of mind being transmitted by parents to their progeny, should evidently be regarded as a postulate merely; and, by consequence not capable of inductive demonstration: nevertheless, by receiving the assumption, we shall extricate ourselves from the inducements to adopt another postulate equally indemonstrable and beset moreover with manifest absurdity—namely, that of admitting a necessity for the continuous exercise of Almighty power in the creation of a new mind or soul for every new being, however impure its source.

The mind's *essence* is altogether indeterminate, but its individuality is certain and susceptible of philosophical investigation. It consists of an aggregate or system of faculties, every one of which exercises its functions through one of a corresponding aggregate or system of corporeal organs; and, by this arrangement, its economy is governed by the absolute physiological law—that one organ never performs more than one distinct function. Animals, therefore, of every kind and in all their manifold gradations, do possess mental endowment; but, in each, the degrees of this can be perceived and appreciated only by its manifestations and the exquisiteness of the corporeal instruments, by the agency of which these manifestations are exhibited.

Physicians have been accustomed from observation of a disorder in the mental manifestations, to regard the *mind itself*

as being susceptible of change and decay, of entering indeed into all the morbid conditions which the illimitable state—INSANITY—comprehends: but, since we know not the mind's peculiar essence, the best philosophy would be—to consider such disorder as connected with different conditions of the material organs by means of which its operations are felt and made apparent: these organs certainly do admit of growth, maturity and decay; they sustain progressive changes, and have likewise their functions altered by the influences of disease: the imputation of disease to the *rational* mind, implies its liability to death and decomposition, and chills our whole nature by extinguishing the hope of immortality.

While, then, the mere vegetable exercises its intuitive ability to select the nutriment most proper for its own conditions; while the irrational animal feels and desires, enjoys a brief existence, and passes into oblivion: man not only has, in more perfect endowment, the faculties assigned to other living beings, but he stands exalted above all creatures in the possession of a moral nature, susceptible of direction by judging and reflecting powers. Faculties peculiar to himself, inspire him with a disposition to the practice of justice and charity: an innate sentiment of religion prompts him to worship a *Supreme Being*; and, guided by its higher energies, his intelligence discovers that He who made the earth and ocean, the starry firmament, and the everlasting sun, He is God. Its own consciousness of an inherent longing after immortality, carries his mind forward in endless progression, into periods of ever-during time: an instinctive tendency to leave this world with all its enjoyments, to spring forward into a far distant futurity, and to expatiate, even in imagination, amid the scenes of an eternity to come, gives to man the expectant assurance that he is formed for a more glorious destiny than to perish for ever in the grave.

II.

DR. BURROWS.

We have perused the letter which Dr. B. has addressed to Sir Henry Hallford, on the subject of the late trial, and its contents confirmed us in the opinion we had previously formed, that Dr. Burrows was a wronged, and what is worse a much injured practitioner. It is difficult to account for the rancour and determined hostility with which Dr. Burrows has been pursued, from the case of Anderton, down to the present time. It was such as might naturally enough lead to a conviction, in his own mind, that a conspiracy existed against him. But we have no doubt that all this hostility sprung from personal enmity. Thus, for example, there is now little question that the recent severe animadversions in the Quarterly Review were penned by the late Dr. Gooch, when on his death-bed! Neither can it be much doubted that this bitterness of spirit, on the part of the late talented and amiable physician grew out of some literary altercations between him and Dr. Burrows. The tenor of the review is clearly not that of an unbiassed and unprejudiced critic. But, '*de mortuis nil nisi bonum.*' Dr. Burrows has still more reason to complain of Mr. Brougham, whose language and observations were equally unjust and unwarrantable. It is lamentable, indeed, that a respectable medical man's reputation may be destroyed, and his family ruined by the unbridled and unmeasured language of an advocate, contending for mastery in a law-suit, without any regard to the truth or justice of the case.

Dr. Burrows' conduct has been so completely exculpated already, in the minds of all medical men, that we need not go over the grounds of his letter to Sir Henry Hallford. But the mischief is done—and the public prejudice is excited through innumerable ramifications where the justification cannot penerate. We conceive it to be the duty of the medical profession to remedy, as far as possible, the evil, and protect a

respectable and deeply-injured member from ruin, by counteracting the impression that has gone forth, and, by patronising the individual, till the pressure of the calamity shall have been removed by time. We hope this will be borne in mind by our brethren, and we do not exhort them to do that which we shall fail to perform ourselves, whenever the opportunity occurs.

III.

M. LISFRANC ON EXTIRPATION OF THE LOWER PORTION OF THE RECTUM FOR CANCEROUS DISEASE.*

We believe it is well known by most of our readers, that M. Lisfranc is considered the Coryphæus of the excisors of the uterus, or parts of it. Numerous successful cases of extirpation of scirrhus cervix uteri have been published by that gentleman, but the extreme laxity of the French in the employment of the terms scirrhus and cancer, has rendered the actual nature of many of M. Lisfranc's cases more than doubtful. The same surgeon has recently read to the members of the Royal Academy of France, a memoir on Excision of the lower Portion of the Rectum affected with Malignant Disease, and of this a good resumé has been published in a valuable Parisian contemporary.

In a proper case for the operation, the fore-finger, introduced into the intestine, should admit of being carried beyond the limits of the disease, and the operator must also have determined the thickness of the scirrhus gut. If not only the parietes of the latter, but the neighbouring cellular membrane be affected, M. Lisfranc doubts of the propriety of operating, having once been embarrassed in this manner himself. Prior to the operation, the bowels should be emptied as far as possible of fecal matters, and the patient should be placed in the position for lithotomy. We now proceed to the steps of the operation.

The extremity of the rectum should be included between two semi-lunar incisions of the skin, meeting an inch before and the same behind the anus. The lower portion is then to be separated from the neighbouring parts by dissecting away the skin, &c. and the rectum brought down lower by means of the fore-finger in its interior. When the disease is superficial, not involving more than the mucous membrane or confined to the tunics of the intestine, and when it extends no higher than an inch, the whole may be readily brought into view, and removed by a pair of scissors curved on their flat plane.

When, however, the disease has extended to the cellular membrane, and reaches as high as two or three inches, an incision must be made in the gut with strong straight scissors (after the preliminary steps described) parallel to its axis, in the posterior part, and it should be extended above the limits of the disease. Two or three hooks are then to be fixed in the inferior part of the rectum, in order to depress it, and if the patient be a female, an assistant renders the recto-vaginal paries prominent by means of two fingers in the vagina; if a male, the urethra is projected by a catheter introduced into the canal. These precautions being taken, the dissection of the anterior part of the rectum is slowly and cautiously effected, and that being done, the separation of the remainder is more easy. The operation, when the cellular tissue is affected, is more difficult in man than in woman, on account of the comparative smallness of his pelvis, the interference of the prostate, &c. but it is by no means unattended with embarrassment in the other sex. The vessels are tied as they are opened, and M. Lisfranc has generally found them small, nor does he think that the internal pudic can be wounded. When the lower part of the gut is excised, the remainder escapes so high as to render it difficult at times to seize it with the fingers and draw it down.

After the operation, M. Lisfranc allows a moderate hæmorrhage to take place, taking care that the patient is not threatened with syncope. The wound is dressed with

* Journal de Progrès, tome I. 1830.

simple ointment, lint, compresses, and T bandage. When the patient is a female, her urine should be drawn off for the first 15 or 20 days, in order to prevent its irritating the wound. Copious suppuration ensues in the latter, and does not begin to diminish till the expiration of three or four weeks. Cicatrization is at first rapid but subsequently slower, and as soon as the opening begins to contract, a large plug of lint is to be introduced on the forefinger, taking care that it enters properly the cavity of the intestine. In none of the patients who were cured has the power of retaining the feces been lost, for a kind of pad (*bourrelet*) forms at the extremity of the intestine, and operates as a sphincter. The more of the rectum that has been removed, the higher is the *bourrelet*, and the greater the tendency of the feces to lodge about the part. The patient is constrained, under these circumstances, to remove them with his finger, "a trifling inconvenience," and one individual was obliged to keep a plug of lint in the aperture, and only remove it when passing a motion. Hemorrhage to any extent is a rare occurrence, but if syncope is threatened, the rectum must be plugged for three or four hours, if the vessel cannot be secured. A set of nervous symptoms, such as shiverings, hiccup, vomiting, and frequent desire to stool, very frequently follow the operation, and the vomiting, especially, may continue for several days. M. Lisfranc has performed the operation on nine individuals, six of whom were females; two women and one man died, or one in three. Two dissections were made, one shewing infiltration of pus in the pelvis, the other inflammation of the veins. We shall give one successful case as a sample of the whole.

Case. Lise Fauniere, æt. 25, entered the Pitié on the 10th June, 1828. She had led a most infamous life, suffered pains in the inferior part of the rectum for three years, and been submitted to anti-syphilitic treatment at the Venereal Hospital. On admission her aspect was squalid, the stools were

passed with pain and tenesmus, mixed with blood, and in very small quantity. On introducing the finger into the gut, a schirrhous thickening of the parietes, reaching to three inches and a half from the anus, was distinguished, and the finger with difficulty traversed the contracted passage. M. Lisfranc operated on the patient, Aug. 17th, 1828, in the manner already described. Only one artery required ligature, a sponge filled with water was placed in the wound, and in two hours all oozing of blood had ceased. At 6, p. m. the pulse having risen, a free bleeding from the arm was had recourse to, and the patient obtained a good night's rest. The dressings becoming very foul, and the wound very painful, from the contact of the urine and feces, the water was drawn off by the catheter, the wound cleaned out by an injection of infusion of mallows, and two more bleedings from the arm employed. On the 20th, the secretion of very fetid pus commenced, and on the 26th, the suppuration was become abundant. The wound was dressed twice a-day, and on the 10th of September it had diminished in extent, the suppuration was less abundant, and the lower part was beginning to contract. A large plug was introduced into the inferior part of the gut, and on the 20th, the wound was reduced to the size of a five-franc piece. The *bourrelet* was now formed in part, and under the application of the nitrate of silver to redundant granulations, and the introduction of a large plug dipped in the chloride of sodium, the wound was quite healed on the 25th Nov. In consequence of the tendency to contraction of the passage, the introduction of plugs was continued, and the patient remained in the hospital till the 28th of April, 1829, in order to ascertain the results of the operation. She retained her feces well, and was able herself to introduce plugs of lint from time to time, in order to maintain the calibre of the canal. This patient was presented to the Academy, and still continues cured.

We do not imagine that this operation will ever be so common in this country as it is in the hands of M. Lisfranc. The operation itself is difficult, in some cases impossi-

ble, and dangerous in all, as the result of M. Lisfranc's operations proves. If the disease be really cancer the chances of a cure are problematical, the difficulties, pain, and danger certain; and if it be not of a malignant nature, no surgeon would venture to perform or to propose such an operation. But such questions as these are not so easily settled, for although the operation be of questionable propriety in one extreme case, and decidedly objectionable in the other, there are some affections of the rectum which are not sufficiently malignant to contaminate the constitution to an irreparable extent, nor sufficiently benignant to admit of any remedy short of a total removal. Whether M. Lisfranc's operation be adapted to such cases is a point which we leave to our able surgical brethren.

IV.

STRICTURE OF THE SIGMOID FLEXURE OF THE COLON.*

Two well-marked cases of this terrible disease, supervening on an acute affection of the mucous membrane of the intestines, are related in the new edition of Dr. Abercrombie's work upon the stomach.

Case 1. A gentleman, æt. 30, who had suffered long from pectoral complaints and scrofulous sores, was attacked in December, 1828, with symptoms of inflammation in his bowels, for which he was actively treated by Dr. Ballingall. The urgent symptoms subsided in eight or ten days, but a constant uneasiness about the pubes remained, which was not relieved by gentle laxative medicines. These operated readily, but the mo-

tions were in general scanty and occasionally he had frequent calls with mucous discharges; the appearance was unhealthy; the appetite bad, with debility, gradual emaciation, and considerable urinary irritation. When seen by Dr. Abercrombie in April, 1829, the abdomen was free from distention, and no organic disease could be discovered, but the bowels were irregular, being sometimes confined, and sometimes rather irritated with frequent slimy discharges. He continued to emaciate progressively till about the 26th of May, when suddenly his bowels became invincibly obstructed, and the abdomen grew distended, tense, and tympanitic. He survived seven days in this condition with very little vomiting, and died exhausted on the 3d of June.

Sectio Cadaveris. "The peritoneal cavity was distended with gas, and also contained an immense quantity of fluid feces. On the surface of the intestines there was a tinge of recent peritonitis. The small intestines were moderately distended; the colon appeared to have been in a state of extreme distention; but it had burst at the caput coli by an irregular opening, and had fallen together without contraction. At the bend of the sigmoid flexure next the rectum, the intestine formed a hard mass about two inches in length, and the calibre of the canal, as it passed through this part, was contracted to a space which only transmitted a full-sized catheter. The contraction was occasioned by a uniform thickening of the parietes at the part; they were of scirrhus hardness, and the internal surface had an ash-colour and an irregular tubercular aspect. The portion thus affected was about two inches in extent, and the intestine immediately above and below was entirely healthy."

Case 2. A lady, ætat. 63, had been liable for several years to a confined and stultent state of her bowels. In June, 1829, she had a violent attack of pain in the abdomen with hiccup which continued for several days. In July she had diarrhoea, succeeded by another attack of violent pain, which was followed by several evacuations, consisting chiefly of blood. From this time the bowels continued very irregular until August, when, after

* Abercrombie on the Stomach, &c. 2d Edition, 1830.

a severe attack of diarrhoea of several days' duration, she was seized with severe pain, followed by tumefaction of the abdomen, small rapid pulse, and prostration. The pain now recurred in paroxysms with intense severity, and there was occasional vomiting. The bowels, which at first were moved with difficulty, after some time became totally obstructed. She died exhausted about three weeks from the commencement of this attack, and a week from the time when the total obstruction of the bowels took place.

Secio Cadaveris. "The intestines were in a state of extreme distention, especially the colon, which was enormously distended, from the caput coli to the sigmoid flexure. It then became abruptly contracted, and at this place a stricture was found, by which the canal of the intestine was so contracted as scarcely to admit the point of the blow-pipe. The part was of nearly cartilaginous hardness, and was covered by irregular scirrhus indurations. The intestine below the stricture was collapsed and healthy."

From the cases of contraction of the sigmoid flexure of the colon which we have witnessed we should say that its ordinary history differs from that of the foregoing cases. The patient, for the most part, complains of a costiveness gradually growing upon him, for which he has resorted to purge after purge, with temporary benefit from each new drug, but a speedy experience of its inefficiency. The intervals between the stools become longer and longer, the belly is blown up with intestinal tympanitis, the patient has a faecal taste in his mouth and vomits nearly all he takes into his stomach whether it be food or medicine, his body exhales a sickly cadaverous or even faecal odour, and at length he either sinks from the incessant irritation of the pent up faeces, or is cut off by an attack of peritoneal inflammation. Of the medicinal treatment we need not speak, but it is difficult to know what to say to the proposal of establishing an artificial anus in the other groin. Supposing that the operation succeeded, a very unlikely supposition, would not the loath-

some remedy be worse than death? And besides, if the excrement were voided from the groin, yet the contraction of the colon is generally scirrhus or malignant in its nature, and would probably, were time allowed, go on to the destruction of the individual by ulceration and its consequences.

II. ALARMING SYMPTOMS FROM DISTENTION OF THE INTESTINES.

Those who see much of practice, and consequently those who see much of hysteria, may perchance be tempted to imagine that they recognise an old acquaintance with a new name in the following case. We shall give it, for it is brief, in the words of Dr. Abercrombie.

Case. "A lady, aged 23, had been long affected with pain in the right hypochondrium, and a very confined state of the bowels, for which a great variety of treatment was adopted with little benefit. In the autumn of 1822, the abdomen became greatly enlarged, tense, and painful. Some relief was obtained from topical bleeding, blistering, and purgatives; but after a severe pulmonary attack in winter, the pain and weight were aggravated, and extended into the left side in the direction of the arch of the colon, with increased tenderness of the abdomen. In spring 1823 she was somewhat improved, but in June and July there was again an increase of the abdominal pain, which became very severe in the course of the transverse colon, with obstinate costiveness, dry tongue and thirst. Some relief was again obtained from topical bleeding, purgatives, and enemata; the latter bringing off frothy discharges, and much flatus. In the beginning of winter 1823-4, she had two pulmonary attacks, after which the abdomen became again very tumid and painful. In April, 1824, she had pain in the right shoulder, pain and numbness of the right thigh and leg, and she often complained of a feeling as if scalding water were passing along her right side. In June, the abdominal pain and tension being very great, a caustic issue was inserted on the right side of the linea alba; purgatives were

persevered in ; and she went to the country, where she remained during the summer and autumn, and improved considerably in strength. From this time her complaints continued to abate, and she has since enjoyed very tolerable health. The uterine functions had been through the whole course of this affection, quite natural."

We do not affirm that this was wholly and solely a case of hysteria, but we contend that it was very like it, and are sure that we have witnessed hysterical cases so closely resembling it in many respects, that it would sorely puzzle a keen nosologist to distinguish and define the points of difference. A young woman affected with obstinate costiveness, pain in the *right hypochondrium*, tumid belly, and various odd sensations, is a patient who, in nine cases out of ten, would be treated with success by purgatives, blisters, and steel, or the antispasmodic medicines. Such a case is one that is constantly occurring to the man in practice, which admits of much benefit from judicious measures, and will certainly be aggravated by extravagant or bold depletion. We may be told that the uterine functions were natural, but that does not materially affect our statements, for it is not uncommon to see females affected with most of the symptoms of chlorosis, or all the extravagancies of hysteria, whose catamenia continue regularly during the time. We have said that this is the case for blisters, and the more we see of this mode of practice in hysterical pains, the more we are convinced of its utility. The remedy acts in two ways ; in the first place it is disagreeable—an excellent qualification ; and in the second it unloads the vessels of the part of that congestion or plethora, call it what we will, that frequently obtains under these circumstances. But we cannot enter on the subject of hysteria, a subject that requires more time and space than we can possibly devote to it here. It is fair, however, to Dr. Abercrombie to add his remarks to the case on which we have been commenting.

"A sister of this lady was affected in a similar manner, suffering most intense pain

in the abdomen, and such tumefaction that she was supposed to have ascites, and was several times on the point of being tapped. She died after protracted suffering, which continued for several years ; and, on examination, the disease was found to consist entirely of an enlargement of the colon. A portion of it 44 inches in length is preserved ; the largest circumference of which is 25 inches, the smallest 16. It was in many parts ulcerated.

"The existence of ulceration in this case gives reason to believe that the disease was originally connected with inflammatory action of a low chronic kind, which gradually destroyed the natural action of the part. But without any cause that can be traced of this nature, there appears to be a disease of the intestinal canal depending upon a gradual loss of its muscular power, the cause of which eludes our researches. An interesting example is related by Dr. Parry, in the case of a medical gentleman who had been long liable to dyspeptic complaints, great flatulence, and irregularity of his bowels. After suffering, for a fortnight, pain in the bowels, with nausea and costiveness, he was seized with symptoms of ileus, accompanied with severe pain, which was most violent in the epigastrium and left hypochondrium. Under the usual treatment this attack subsided after several days ; but he continued from this time to be liable to similar attacks, which were accompanied by vomiting, obstinate costiveness, and severe pain, with hardness and distention in the epigastric and left hypochondriac regions. The bowels were at all times unmanageable, and the motions thin, scanty, and not formed. The pulse was little affected. The matter vomited at length became feculent, and he died with symptoms of peritoneal inflammation, about six months after the commencement of these attacks. On inspection there were found marks of peritonitis with adhesions ; and the omentum was in a thickened and hardened condition. But the principal appearance was an enormous and uniform distention of the colon, the arch of which occupied entirely the epigastric and

hypochondriac regions, so that the stomach and the liver were pressed upwards, high into the thorax. Its coats were in some places slightly thickened, and the peritoneum covering it was of a dark colour, but there was no appearance of contraction or obstruction in any part of its course. The enormous distention extended from its commencement to the sigmoid flexure, and it contained an immense quantity of feculent matter, partly solid and partly fluid. The sigmoid flexure and rectum were perfectly healthy. The ileum was distended, and dark coloured, but in a much less degree than the colon."

Dr. Abercrombie gives a striking example of the powers of galvanism in some obstinate affections of the bowels. A gentleman had been under the care of the most eminent physicians in England and Ireland for an obstinate state of the bowels, originally ascribed to having slept in a newly-painted room. He emaciated much, and the complaint had now gone on for two years, when Dr. Cheyne recommended galvanism. In about three weeks the natural action of the bowels was restored, and he soon recovered perfect health.

V.

COLD SPIRITUOUS LOTIONS TO THE CHEST.

In a paper signed PHILAETHES in the Medical Gazette, the writer strongly recommends the above application in certain chronic affections of an inflammatory character seated in the chest. The same has been recommended by Dr. Sutton and others in abdominal inflammation, and we have seen the suggestion for thoracic, but cannot remember the authority. The lotion which Philaethes uses is composed of seven parts of water to one of alcohol, and a little Eau de Cologne. It is applied by means of linen folded six times, across the upper

part of the thorax, while the patient is in bed. It may be used tepid at first, and afterwards cold. Several cases are related in illustration, of which we shall notice two or three. The first was a young lady residing in Brompton Square, who had suffered for two years from an incessant cough. After trying several remedies Philaethes had recourse to the spirit lotion. From that day the cough abated, and in a month ceased in toto. The next case was that of Captain M. of the India Merchant Service, who had had a troublesome cough for months, with pain in the cardiac region. Other remedies failing, the lotion was tried, and, in a week or two, with decided benefit. In a month he was well.

Mr. Smith, a clergyman in Cambridge, came to the author of the paper with pain in his side, and "many symptoms threatening phthisis." He thought the case full of danger, if not of despair. He recommended the cold lotion, the mildest kinds of animal food, gentle exercise. He recruited, lost his cough, and ultimately the pain in his side. Philaethes thinks, however, there are tubercles. He does not propose the lotion as a remedy for phthisis; but as more or less of pleuritis frequently attends tubercular consumption, he thinks the lotion will be beneficial in that case. He has applied the alcoholic lotion in hæmoptysis, and with, he conceives, great advantage. In a word, "he would recommend the spirit lotion in most, or all, chronic cases of pectoral affection. In many we shall have the pleasure of seeing the patient recover under its use—in none can it do injury." He has never known it give cold; but he generally takes the precaution of applying it tepid at first, and causing it to be used under the bed-clothes at night.

It would have been more satisfactory if Philaethes had given a more distinct estimate of the actual condition of the thoracic organs, as ascertained by means which have now happily triumphed over all opposition. We hear no more of sarcasms against auscultation and percussion. Those who first opposed the stethoscope openly, as a bubble, a piece of quackery, &c. have either

availed themselves of the advantages resulting from its application, or become prudently silent to the opposition benches.

seasons have exhibited considerable alterations from the ordinary and even "tenour of their way," since 1825.

VI.

MODES OF TREATING INTERMITTENT FEVER PURSUED AT THE VARIOUS HOSPITALS OF PARIS.*

It will be curious, and may be useful, to notice a *résumé* of the Parisian modes of treating intermitting fever which has lately been published in a French contemporary. It is singular that scarcely two physicians in this metropolis treat an ague in precisely the same manner, though all agree in the principle of administering bark in one of its many forms. One will commence with a vomit; another with a purge; a third will neither vomit nor purge but proceed at once to the cinchona; and a fourth, whom we take to be the most judicious of the whole, will adapt his emetic, or his calomel and jalap, or his sulphate of quinine to the duration of the complaint, the character of the accompanying symptoms or lesions, and the relative condition of the patient. Let us see how matters stand with our Parisian confrères.

It appears that in Paris, as in this country intermitent fevers have been more prevalent within these last few years, than they had been for some time previously. The ratio *principii*, or cause, is keenly disputed on the other side of the water, and some local circumstances are thought by one party to afford an explanation of the circumstance. This may, in part, be true, but the general occurrence of aguish complaints in various parts of Europe which had latterly been free from their visitations, must depend on some more potent and extensive influences. It is more than probable that these exist in the atmosphere rather than the earth, for the

HÔPITAL BEAUJON.

During the year 1827, one hundred and eighteen patients affected with intermitent fever have been admitted into this hospital; their ordinary time of remaining in the institution is thirteen days. Of these 118 patients 96 were males, and 22 females, but as the beds for the former are one sixth more numerous than those for the latter, the calculation will be 82 men to 20 women, or as 4 to 1. No doubt the causes of this great disparity between the liability of the sexes to ague, must be looked for in their different habits of life, as well as in the circumstances of profession and exposure. Forty-two of the individuals were above thirty years of age, seventy-six below it. Twelve cases occurred in Winter, thirty-seven in Spring, forty-two in Summer, and twenty-seven in Autumn. The quartans predominated in Winter, the tertians in Spring and Autumn, and the quotidian in the Summer. The majority of the patients from the country were from Boulogne, Boint-du-Jour, or other such damp localities, whilst the Parisians were mostly inhabitants of the dark narrow streets in the vicinity of the Seine, or persons with sedentary and unwholesome occupations.

The writer of the foreign article on which we are now employed, who appears to be an off-set from the "physiological" trunk in the Val-de-Grace, in other words a disciple of Broussais, lays down the following rules of treatment, founded on those which guide that celebrated systematist. 1mo. The first means should be directed against the irritation in the system, the removal of which generally removes the fever also: our author has seen *many* of these affections, intermittents, yield to antiphlogistics only at the Val-de-Grace;* 2ndo. If symptoms of

* The Broussaïans are then more fortunate than we. Is it because their doctrine teaches that they *should* be so?

gastric or intestinal phlegmasia be present we should abstain from administering febrifuges in the first instance; 3to. When the irritation is confined to the mucous membrane of the *primæ viæ*,* it is proper to administer them by the colon, and vice versâ; 4to. The febrifuges, especially quinine and its preparations, being viewed as irritants, should only be employed in small doses. Making some allowances for modes of expression and national usages, as in the *læment* proposition, the above rules are very good ones and deserving of more consideration than they often seem to receive in practice.

In the 118 cases that occurred at the Hospital during 1827, M. Renaudin, the physician in charge, pursued the following method with universal success. After the first paroxysms six grains of the sulphate of quinine in three pills were given until two periods had passed over without a fit; the same medicine was then continued for eight days, the dose being gradually diminished, and a pill being given from hour to hour in such a manner that the last was taken two hours before the expected paroxysm. The diet was good until the cessation of the fever.

HÔTEL DIEU.

M. Husson, one of the physicians to this establishment, gives the sulphate of quinine internally unless there be evident counter-indications. He begins with doses of one or two grains, which he augments progressively and indefinitely, according to the obstinacy of the complaint. A severe tertian was arrested in a girl of sixteen by a single grain dose of the sulphate.

M. Recamier usually begins with four or six grains of the quinine, and increases the dose daily, if necessary, to twelve, fifteen, or eighteen grains in the twenty-four hours. — Such is the treatment of *ordinary* cases by the other physicians of the Hôtel Dieu, as well

as by those of the Charité and other institutions of Paris.

M. Bally, who believes in the *essentiality* of fevers, in the most ancient and extended sense of the term, maintains that the sulphate of quinine is only an irritant when given in small and repeated doses. Accordingly he prescribes it in very large ones, beginning with thirty-six, forty, or even sixty grains in the twenty-four hours. M. Bally asserts, that this practice not only arrests fevers promptly but prevents the occurrence of the organic alterations that are too often left behind. Like those who pursue the very opposite plan, M. Bally can appeal to a number of successful cases. This physician has been recently experimenting on the *salicine*, or principle obtained from the bark of the willow. In the case of a young pregnant woman, who attributed her complaint to terror, and suffered from *two fits* during the day, the fever was allowed to run on for seven days, and eighteen grains of the salicine in three doses were then prescribed. The remedy was continued for the two succeeding days, when its use was discontinued on account of some irritation which it seemed to produce in the throat; the fever was perfectly arrested. The reporter adds that several other equally conclusive cases have occurred in favour of this medicine.

The ligature of the limbs has been tried several times at the Hôtel Dieu, and with occasional success, but not sufficient to inspire any extraordinary opinion of its powers in the minds of the experimenters.

LA CHARITÉ.

Experiments have been made at this hospital on the febrifuge powers of the misletoe in powder, which has lately been represented as more efficient than even the sulphate of quinine. M. Chomel has employed it on five or six patients during the course of the last Autumn, but without success. The following facts deserve to be recorded and remembered. It is not because the virtues of a miserable drug like the misletoe, if drug it can be called, are put in question, but be-

* By *primæ viæ*, the *upper* portions of the intestinal tube are obviously alluded to.

cause the same circumstances step in to disturb our reasonings and vitiate our conclusions with respect to more potent and efficacious articles of the *materia medica*. The fact then to which we would draw the attention of our readers is this—M. Chomel being desirous of testing the powers of the mistletoe, selected, last Autumn, *twenty-two*, patients labouring under intermittent fever. Before exhibiting the medicine he waited for the appearance of some paroxysms, and the consequence was, that in *seven* the fever ceased spontaneously, and a cure ensued without the aid of any medicinal remedy whatever. In *four* other patients the paroxysms gradually and spontaneously diminished, and required a very small dose of the quinine for their complete dispersion. Of the eleven remaining individuals, *eight* displayed symptoms of intermittent phlegmasia, and were cured by antiphlogistics; and the final three, who alone became subjects for the mistletoe, experienced no benefit from its use but were cured by the quinine. This does not prove much in favour of the mistletoe.

Here we must conclude, and perhaps we may be allowed to observe that so long as good bark is to be procured, practitioners will trust little to the inferior remedies which chance or ingenuity may point out as its substitutes. If a time shall arrive when cinchona is no more, or so scarce as to be sealed to all but the gold of the wealthy, then, and not before, will the numerous indigenous or foreign bitters be put into requisition for the treatment of ague. At present, bark and arsenic are worth ten times more than the whole of them.

VII.

BRONCHOCELE IN LOWER CANADA.*

It appears by a paper from Mr. Bowie in our Glasgow contemporary that bronchocele is very frequent in Lower Canada, although so level a country, that "one may

travel hundreds of miles without meeting an eminence worthy the name of a hill." It would also appear that the French peasantry are peculiarly subject to the complaint, for in many districts there is scarcely a French family but has some of its members affected with goitre. Mr. Bowie has not, so far as we can see, formed any decisive opinion with regard to the etiology of bronchocele, indeed we should wonder if he had, but the following observations bear upon the subject.

"An argument in favour of the opinion that this disease is caused by the use of snow water, may be found in the fact, that in Canada the ground is covered with snow for about six months of the year; and in some places, where the disease appeared to me to be more than usually common, the inhabitants, during that period, had no other water than that procured from melted snow. But there are other districts, which are supplied with water, either from springs or clear streams, where the affection is by no means uncommon. It is only occasionally indeed that springs are resorted to by the peasants, by far the most common method of supplying themselves being from the neighbouring brook or river; and should there not be sufficient depth, to allow them to procure the requisite quantity from below the ice, they then have recourse to the gathering of snow, which is melted for domestic use.

"It is a fact, notorious amongst the residents in Canada, that the disease is mostly confined to the French peasants, and never appears amongst the natives of Britain, though they have been many years in that country. I have known it, however, amongst their children, although rarely. The difference in the manner of living, among the latter, and the greater attention to diet and other comforts, may help to explain how they are more exempt from the disease than the former. The French peasants are a hardy easy minded race, who care little about the kind of food or clothing they make use of; bacon, which they generally rear themselves, constitutes the principal article of their diet; if they have this, either made into bouillon, or eaten with a

* Glasgow Med. Journ. No. IX.

piece of bread and a little rum, they are perfectly contented. This manner of living no doubt tends to produce a grossness of habit, of which there is no want of proof, to any person, who has had an opportunity of seeing, and treating their diseases.

"Again, the disparity of seasons in that climate, may have some influence in arousing affections, which, in a more uniform temperature, and better regulated habits, might for ever have lain dormant. In a climate, where in summer it is no unusual occurrence for Fahrenheit's thermometer, placed in the shade, to rise as high as 96°, and in winter to sink to 25° and 30° below zero, one would suppose that a considerable modification of dress would be absolutely necessary. But this the Canadian in a great measure disregards. He may be seen in summer in his jacket and trousers of coarse homespun, and his *bonnet rouge* on his head, and in winter he makes little addition, except a great coat of the same stuff, with a sash for the middle; but these are so carelessly put on, that they appear to be worn more from fashion, than from any necessity arising from the weather. I have frequently seen so much indifference displayed by these people, that in the coldest weather, they would drive over the snow, with their clothes so loosely fastened, that their bare bosoms would be exposed to a piercing atmosphere. That this exposure to the inclemency of the weather is calculated to call into action the predisposition to the disease may be inferred from the fact, that the higher classes of society, are comparatively little affected,—the English settlers never, and their children very rarely."

We fancy that few are now inclined to attribute very much in their theory of causation to the snow-water, but that the water in one way or other operates in the production of goitre, we have ever maintained and do still believe. Diet may have some effect in certain places, but in the Alpine regions, the cradle of the cretin and the land of goitre, nothing is more certain than that children fed in very various ways are almost

equally liable to bronchocele. With regard to the exposure of the Canadian to atmospheric changes we shall simply observe that such exposure does not produce bronchocele elsewhere, nor is it probable that of itself it should prove a material cause of the disease. Mr. Bowie believes that it is connected with a scrofulous diathesis, and as there is no great novelty in this opinion we need dwell on it no longer. We pass to another point.

"With regard to the treatment of goitre, it is unnecessary to enlarge on the different remedies which have been employed for this purpose. It may be sufficient to state, that I have tried almost the whole of them, and never saw any good effects produced except the iodine. So extraordinary have I found the efficacy of this remedy, that frequently while the tumour was rapidly disappearing under its influence, I have purposely stopped it, and substituted some such remedy as the potash, and most commonly the curative action was immediately suspended, and no farther progress made until the iodine was resumed.

"It seldom happens, that the Canadian peasants apply for medical advice at an early period; it is only after their own receipts have been long made use of in vain, and the complaint existed probably for a number of years, and attained such a size, as to become a deformity, that they consent to apply to the surgeon. Their backwardness will appear the more excusable, when we consider that until very lately, they were sceptical as to the power of medicine in the cure of bronchocele. This want of faith, however, is rapidly disappearing, and a belief, that medicine has some influence over this hitherto intractable complaint, is now manifested by those children of the forest, who form an opinion from the effects which they themselves have seen produced, without regard to traditionary prejudices.

"Very few cases that were not of longer standing than five or six years, failed either to be cured, or very materially alleviated, by a sufficiently long continuance in the use of iodine. The form used, was that of

tincture, made by dissolving 48 grains in an ounce of spirit of wine. It was generally commenced in the dose of ten drops, and gradually increased until it reached thirty, three times a day. The time that elapsed before any effect was produced, was very various; sometimes there was a diminution in about eight or ten days; at others it was a month or two, before much progress was made. Occasionally a case occurred, over which the tincture of iodine seemed to have little control. In such, an ointment of the hydriodate of potash, rubbed on the swelling, was substituted, and often proved a powerful remedy. Very few cases occurred (with the exception of those of very long standing, where probably the derangement of the gland was so great, as to be altogether irremediable,) that withstood the use of these two remedies combined. In general, however, either of them was sufficient to affect a cure. It may be necessary to remark, however, that in recent cases, where pain and inflammation existed, the iodine or the ointment were not primarily employed. In such cases, it was found necessary to adopt an antiphlogistic plan of treatment, until the inflammation had abated. It was when the tumour had become somewhat indolent, that the beneficial effects of this specific were most marked."

When goitre is endemic and prevails to some extent it would appear to be more under the influence of iodine, than in counties or districts where it is sporadic only. At least, if this be not the fact, it will be difficult to account for the discrepancy of results between the iodine practice in Switzerland, and in Mr. Bowie's hands in Canada, and those obtained in this country. In the former it is hailed as almost a specific, in England it is a valuable remedy, but by no means infallible. We have witnessed its failure in several instances, and the statements in Dr. Eardsley's recent Hospital Reports, are very decisive on this point. This may be unpalatable to enthusiasts.

VIII.

ACUTE GASTRITIS SUPERVENING ON CHRONIC, ACCOMPANIED BY ARACHNITIS. Professor HORNER, of Pennsylvania.

"William C. aged 43, innkeeper, has used alcoholic drinks in excess for the last eight or ten years, and become much enfeebled from them. The last Summer he had a severe dysentery which lasted several weeks.

Nov. 22d, 1827.—I visited him for the first time.

Habitude.—Not much emaciated, skin pallid and temperate.

Countenance.—Dull and unmeaning.

Intellectual Functions.—Disposed to taciturnity, and dull in apprehension.

Sensitive Apparatus. Hearing dull.

Respiration and Circulation.—Natural.

Locomotive Apparatus.—Very much enfeebled, scarcely able to walk.

Digestive Apparatus.—No appetite.

He did not complain of pain in any particular part. Ordered valerian tea.

November 25th. I visited him again, and found him labouring under hallucinations, of which he was sensible; for he observed that though the figures were before his eyes, yet he knew they were deceptive. He complained also of pain in the epigastrium, and suffered from a retention of urine. The muscles of the abdomen were rigid, and drawn towards the spine. He had spent several nights without sleeping. Ordered opium two grains, and camphor one grain, to be made into a pill, and repeated every three hours till sleep be procured. Four of these pills produced the desired effect, and he slept soundly the following night.

The next day forty leeches were applied to the epigastrium with much advantage in diminishing the pain there, and two days afterwards a blister was put upon the same region.

December 1st.—His speech became suspended, great tenderness occurred in the abdomen, and the most excruciating pain in the lower extremities upon their being moved. His tongue became covered with a

thick yellow coat and his strength exceedingly prostrated. Volatile alkali was administered in a julep to the amount of five grains every two hours. He took several doses of it, and the next day I found that the moisture of the tongue had disappeared, and the yellow coat had dried up into a dark brown one. In the further progress of his treatment up to the day of his death, a mild cathartic was administered on three or four occasions, also a decoction of serpentaria and bark at intervals. His nourishment was wine whey, arrow root, and such light articles as he could be induced to swallow.

It was attempted twice to leech him on the head, but the leeches refused to bite; he was then cupped on the temples. He was also cupped along the spine, half a dozen cups on each side; and had mustard poultices applied to his ankles. He sunk gradually, and died this morning, December 7th, at four o'clock. From the day on which the retention of urine first occurred till the day of his death, the bladder continued paralytic, and an extremely fetid, dark urine was daily brought off by the catheter. Also, for several days before death, he was incapable of moving the lower extremities, notwithstanding their extreme sensibility to the touch.

Autopsy.—Twelve hours after death.

Head.—Very strong adhesions of dura mater to bone. In attempting to remove the latter, several drachms of serum were lost, which were supposed to come from beneath the tunica arachnoidea. The latter was turbid, and raised in vesications.

Blood vessels of pia mater very turgid, as also those in the cerebri; the latter on being cut into, bled freely, and much serum exuded from it. Cerebellum soft; adhesion between thalami unusually strong; a cluster of transparent vesicles on each side of plexus choroides; blood-vessels of velum very turgid. Spinal marrow, veins on surface very turgid; very great vascular fulness internally, giving a red pink colour along the roots of the anterior fasciculi of nerves where they came from within the medulla spinalis. Spinal marrow not so vascular along the roots of posterior fasci-

culi, but still having a superabundance of blood.

Thorax.—Ancient universal pleuritic adhesions on both sides; lungs healthy; heart healthy, its blood not coagulated.

Abdomen.—No peritoneal disease.

Stomach universally inflamed, and within of a deep pink colour, not coming from extravasation as in fever, but from the immense number and the fulness of its veins, which ran along the surface of the internal coat. At many places their capillaries were so numerous as to look at a little distance like small spots of extravasation, which, however, with the aid of a microscope were found to be congeries of very fine vessels. Near the cardiac orifice there was a round patch, two or two and a half inches in diameter, consisting of thickly interwoven veins, containing black blood, and looking as if they were varicose; they were on the internal surface of the mucous membrane. In the pyloric region were two reddish slate-coloured patches, the indications of a chronic irritation there, and about twenty-four lines in diameter. Pylorus thickened; stomach small; scarcely any gas in the bowels.

Mucous coat of duodenum and jejunum inflamed to almost the same red colour with that of the stomach; ileum and colon of a bright pink colour internally; no ulceration of intestines; colon contained some well-elaborated fæces.

Liver common size, degenerated into a drab colour, hard, diminished vascularity; acini consisted in little hard scirrhus-like grains. The secretion of bile seemed to have been suspended, for the gall-bladder contained only a little black-coloured mucus.

Pancreas healthy; spleen healthy; kidneys healthy. Mucous coat of bladder inflamed, being injected with a network of veins, large and small, which were particularly abundant about the neck.*

We shall not attempt to decide on the priority of disease in the brain or the stomach, in the above case. That these

* American Journ. Med. Sciences, No. VIII.

two organs act and react on each other, is well known; but the extent of influence which the stomach is capable of exerting on the intellectual functions is not generally understood. The presence of air, acid, or both, in the stomach, duodenum, or upper intestines, has caused many acts of suicide—and every day causes intense mental suffering, without either patient or doctor being able to tell where the cause lies. Several instances have come within our knowledge, where the most intense despondency of mind and irritation of the feelings were almost instantly put to flight by a dose of Brandesh's liquor potassæ, a tea-spoonful of calcined magnesia, and some cinnamon water. The effects of these simple medicines are sometimes surprising. One gentleman assured us that after such a dose he discharged such quantities of flatus, upwards and downwards, that he was absolutely amazed where it could all come from. This was followed by a purgation which strong cathartics could not previously effect. The gloom of mind and irritability of temper disappeared with the discharges of flatus, and and might be literally said to have "vanished into air." The same remedy produced similar phenomena again and again, not only in the individual alluded to, but in many others. This hint may prove useful to some of our brethren.

IX.

RETENTION OF URINE FROM SUPPOSED DOUBLE BLADDER. By M. EHRLICH.*

A man, æt. 50, who had suffered for 10 years from attacks of retention of urine, consulted M. Ehrlich on the 28th of September. He complained of being harassed with a prolapsus of the rectum, since the appearance of which the difficulty of passing his water

had increased, and now flowed only *guttatim* with insupportable pain, the bladder was full, hard, and prominent above the pubes; the anus encircled with hæmorrhoidal tumours; the cervix vesicæ swollen, but the prostate apparently healthy. The urine that was voided was so dark as to look like beer. The patient denied having ever been affected with a venereal complaint. Warm baths, demulcents, leeches to the perineum, &c. were prescribed by our author, but the patient refused to permit the introduction of the catheter. Other means were adopted, amongst the rest quinine and the tincture of the muriate of iron, but the symptoms became more severe, and on the 6th of October the catheter was introduced, with considerable difficulty and violent pain to the patient. Upwards of three pints of urine mixed with mucus were drawn off, yet still the desire of micturition continued. No calculus, nor any thing like one was discovered; the extreme irritability of the individual prevented the instrument's being left in the bladder.

No more urine flowed till the 9th, when our author made many ineffectual attempts to re-introduce the instrument. On examination per anum, the bladder was felt in the left side of the pelvis, with its cervix directed towards the right. The patient being constrained to use the close-stool, made violent attempts at micturition, which ended in the expulsion of a few ounces of urine, and prolapse of the rectum to the extent of four inches. M. Ehrlich instantly reduced the latter, and succeeded in passing an instrument and abstracting more than four pints of urine. The desire of voiding more continuing, the operator suspected that some accessory pouch might exist, and succeeded in forcing the instrument, which was fourteen inches long, into a narrow passage of which he could not reach the termination, and from which about two pints of fetid urine issued. Relief was now experienced, the instrument was introduced daily with facility till the 16th, and all seemed to promise well. From this till the 25th, M. Ehrlich was prevented from attending, and his substitutes in the interim had failed

* Journ. Complémentaire, No. 36. Mars, 1830.

in carrying the catheter farther than the neck of the bladder, whilst the patient suffered from considerable hæmorrhages from the rectum and urethra. He was now in a pitiable state, the symptoms being low and typhoid, the testicles swollen, the penis gangrenous, and the rectum prolapsed and livid. Our author punctured the bladder from the rectum, when six pints of altered bloody urine flowed out, and the prolapsus recti was reduced. The patient rallied in some degree, but the canula giving rise to great irritation, was removed, the difficulty of making water returned, and on the 28th, the operation of puncturing the rectum was repeated, after which the catheter was retained in its place for two days.

The unfavourable symptoms subsided, and on the 3d of November our author attempted to re-introduce the catheter. At first it penetrated, with some resistance, into an opening, but nothing issued, and then by manipulation it was directed into the bladder and two pints of urine obtained. On passing two fingers into the rectum, a tumour like a full bladder was felt in the left side of the pelvis; on which our author was convinced that this really was a supernumerary bladder, succeeded in getting the catheter to enter it, and evacuated three pints of urine. On injecting a bland fluid he felt this second reservoir become distended, which confirmed him in his opinion of its nature. For seven weeks it was necessary to perform the painful and difficult operation of catheterism for this unfortunate patient, but his career was drawing fast to a close. On the 22d of December he was seized with a rigor, peripneumony followed, and on the 10th of January he died.

Sectio Cadaveris. In the left side of the pelvis, between the rectum and ordinary bladder, was a membranous sac, equalling the latter in size, and closely united to it. The natural bladder, which we shall call the anterior one, was of its usual form, and in contact by its posterior surface with the unnatural, or posterior bladder, which was more rounded. The peritoneum was in exact

contact with the posterior wall of both bladders; the anterior and external wall of the posterior bladder was united by cellular tissue to the left side of the pelvis. The right ureter terminated in the usual way; the left passed along the posterior and external surface of the second bladder, was much dilated at its point of contact with it, and passed on to the fundus of the true bladder behind the left spermatic cord and before the right. The left vesicula seminalis was closely united by cellular tissue to that of the second bladder. The prostate was only connected with the first; the veins of the plexus of the rectum and of the bladder were very much dilated.

The long muscular fibres which extend from the apex to the fundus of the bladder, were limited to the anterior one only. The posterior bladder was provided with circular and verticle muscular fasciculi, strongest at the junction of the two reservoirs. The muscular coat of the anterior bladder was three lines in thickness, so strong as to look like the columnæ carneæ of the heart, and, like them, leaving intervals between its fasciculi of fibres. The mucous membrane was not thickened. In the posterior wall of the first bladder was an aperture three lines in diameter, opening into the second. The parts around the aperture constituted the partition between the two, the parietes of which were closely and almost inseparably united.

M. Ehrlich looks on this as a satisfactory instance of a congenitally double bladder. We confess that the particulars do by no means carry conviction to our minds, but lead us to believe that the second reservoir was rather one of those exaggerated pouches from the bladder, which occasionally protrude like herniæ or staphylomata between the packets of muscular fasciculi. Many reasons, which will occur to the reflecting reader of the case, induce us to hold this opinion as being the more probable explanation of the facts. We do not readily perceive how this pouch or second bladder, be it which it may, gave rise to retention of urine. There might be a difficulty expe-

rienced in expelling its own contents, but why, or in what manner, should it operate in preventing the natural bladder, with a morbidly increased muscular power, from forcing the urine in the latter through the urethra? Surely there must have been some obstruction in the latter, and if such there was, we must look to it for the fons et origo mali!

X.

OBSERVATIONS ON THE PATHOLOGY OF
VENEREAL AFFECTIONS. By BENJAMIN
TRAVERS, F.R.S. &c.*

This little work on the venereal is merely the offspring of an anniversary meeting of the members of the Hunterian Society, arrayed in a suitable tegument of pasteboard, and affiliated to those proprietors of so many hot-pressed bantlings, Messrs. Longman and Co. It is not to be expected, under these circumstances, that the foundling, should have swelled into the goodly corpulency of a full-sized octavo; we might as well expect that the shy miss should display, on her first coming out, the mature coquetry and confident ogle of the trained and *accomplished* madam. But to drop the metaphor, Mr. Travers' brochure is a short but shrewd essay, containing many points which are worthy of attention, and in some instances open to dispute. It is not consistent with the objects of this Journal to enter on the analysis of works on syphilis, but we cannot refrain from noticing some parts of the present essay, that we hope will not prove unacceptable to our readers.

GONORRHOEA.

Mr. Travers observes that a purulent discharge from the male urethra or female vagina, occurs not unfrequently independent of sexual intercourse, and, as a sym-

thetic affection, may exist even in infancy. This should be borne in mind by practitioners, for several instances of serious consequences, from ignorance of this fact, have been recorded. The purulent discharge from the vagina of young children has been looked on as evidence of violation: indeed, if we mistake not, such a blunder was made very lately by a medical man, and gave rise to unpleasant discussions in the newspapers. The vaginal mucus of a maiden woman may be converted, by any inflammatory action of the parts, into puriform fluid; and attempts to deflower female children have been frequently found to produce a purulent secretion from the vagina, independent of any gonorrhœal taint in the offending party.

"I believe that the vaginal secretion in either of these, or similar cases, is capable of communicating the inflammatory irritation to other mucous surfaces, either of the same or another individual. I have seen many cases of acute suppurative inflammation in the eyes of new born children, where I was well convinced that the mother could not be the subject of gonorrhœa, and others, in which the existence of that disease was indirectly ascertained, though it could scarcely have been suspected: but I never met with a case in which, upon strict inquiry, neither this nor the inflammatory leucorrhœa, so often attending upon advanced pregnancy, was not ascertained to be present. It is well known, that a woman so affected sometimes communicates a discharge to her husband; the case being not so rare, in reputable classes of society, as to render the fact doubtful to experienced surgeons."

From these premises, then, our author concludes, that the affection termed gonorrhœa is not necessarily to be referred to any specific quality of the matter. This is certainly true, but we believe that it *ordinarily* depends upon a specific contagion. Mr. Travers, however, brings forward arguments to prove that gonorrhœa is of a simple inflammatory nature, and that "its ordinary origin is from the irritation of purulent matter. I say 'ordinary,' because we have seen that the disease may arise independent of intercourse, or after connexion with a sound

* Octavo, pp. 75. London, 1830.

female, the urethral membrane being already irritated, or even inflamed, but not discharging purulent matter." If we perfectly understand the forgoing proposition, we have our doubts of its absolute soundness, nor do we think that the arguments on which it is bottomed are unanswerable. But n'importe; we pass to another point.

"Hitherto I have spoken of the gonorrhœa, strictly so called, viz. the inflammatory secretion from the male urethra and female vagina. So long as sound surfaces remain on both sides, it is my belief that no secondary symptom of a specific character follows; that in fact no poison is formed. I do not say, that no such quality belongs to the matter which may be secreted by unbroken surfaces. Much of the difficulty of this subject has arisen from the supposition that either gonorrhœa or sores, or both, are the product of a particular virus or poisoned matter, and that a gonorrhœa necessarily gives a gonorrhœa, and a sore, a sore. This is altogether erroneous. Inflammation is excited by the irritation of matter from the inflamed follicles of the sound surface as well as from the ulcerated surface, and the difference of its effects upon the party who receives it, depends exclusively upon absorption or non-absorption, i. e. the formation or absence of a sore, a circumstance often accidental."

The proper gonorrhœa, or secretion from the unbroken mucous membrane of the urethra is incapable, says Mr. Travers, of producing secondary symptoms; but if an excoriation or an ulcer (gonorrhœal) be present, the matter which it secretes is capable of producing, by its absorption, secondary symptoms in the individual. "The absence of secondary symptoms in pure gonorrhœa depends, therefore, not upon any difference in the quality of the matter, but upon a law of the animal economy, *that the inflammatory secretions of the sound surface are not absorbed into the system.*" Now we rather think that this doctrine is heterodox, that it is a heresy, and a keen disputant might shew, without much difficulty, that it leads to the notion of a similarity, if not consanguinity, be-

tween the gonorrhœa and the lues. This at least is certain, that unless the characters of the gonorrhœal sore be distinct and distinguishable, without much uncertainty, from the syphilitic chancre, they must come in practice to be treated as the same; and this will apply with even more force to the secondary symptoms, for unless the diagnosis of the syphilitic and the gonorrhœal be tolerably easy in itself, we shall merely have the *history* of the primary sore for our guide, a venereal history fallacious to a proverb! The following, then, are the distinguishing marks of the gonorrhœal sore and secondary symptoms, which we give in our author's own words.

"The distinguishing features of sores produced by gonorrhœal matter, are circularity, flatness without induration, whether raised or level with the surface; seldom solitary, often several; their greater frequency on the anterior and posterior verge of the prepuce, or beside the frænum; i. e. at the angles of reflection between the layers of the prepuce, or the close and loose investment of the glans, than elsewhere. In the female, they are likewise commonly situated at the junction of the mucous with the cuticular membrane upon the labia, or at their inferior commissure. Their margin is blunt but not indurated, the character of the granulation is spongy and indolent, and though they clean readily, they heal slowly. Lunar caustic, lightly applied, quickens them; and the solutions of caustic, copper, zinc, and alum, escharotic astringents, are among the best local remedies.

"The secondary symptoms of the gonorrhœal sore are as strongly marked, and present as distinct a character as those of lues. The glands in the groin are oftener enlarged and indurated, than otherwise, in protracted cases; but, as in proper gonorrhœa, the affection is sympathetic. The appearance of secondary symptoms is certainly not peculiar to these cases. The inflammation of the velum palati and uvula is diffuse and superficial; the surface is roughened with innumerable small tufts of white lymph, or pitted with small and shallow indentations,

where ulceration has taken place. These are so slight as often to escape ordinary observation. They are seen chiefly upon the tonsils, uvula, apex and edges of the tongue. The sharp, deep and clean fissures of the tonsil, like the roughened and pitted tonsil, are consequent upon gonorrhœal ulcers of the genitals; but this appearance is later, and I am disposed to think, induced by the partial and alterative action of mercury upon the system; in other words, a progressive stage towards the cure. The gonorrhœal sore throat is accompanied by considerable irritability, to stimulant fluids especially. The excavated ulcer of lues, with its abrupt high-coloured margin, is not more strongly characterized, or more readily distinguished. The cutaneous affections are slight, and in character presenting less variety than those of lues, so far as my observation enables me to speak. The papular and squamous are the most common, the pustular and tubercular, occasional. The lichen and psoriasis upon the trunk and limbs, and the achor and acne indurata, thickly distributed upon the face and verge of the hairy scalp, are the forms which I have chiefly recognized. The attempt to discriminate and class the minute varieties of primary sores, and to establish corresponding determinate forms of cutaneous eruption, appears to me to suppose an uniformity at variance with observation, if not with nature, and to render what is sufficiently clear for all practical purposes, studiously obscure. General character is a sure and sufficient guide. This will pretty infallibly distinguish the gonorrhœal sore from the chancre, the gonorrhœal sore throat from that of chancre, and in most instances, the eruptions consequent upon either, from the eruptions produced by mercury. I have not, however, attained such nicety of discrimination, as to pretend to determine the character of the primary sore from that of the eruption, with any feeling of confidence. The scrotum is frequently the seat of scabbing excoriations and eruptions of a peculiar character, connected with a morbid thickening and elongation of its extensive cutis. These, I believe, are generally depending upon direct irritation. The

verge of the anus likewise presents peculiarly characterized eruptions, which I have been sometimes disposed to regard as resulting from a similar cause."

So much for the sore and the secondary symptoms of gonorrhœa, and our author next adverts in succession to the inflammation of the conjunctival palpebra, tenderness and soreness of the flat bones, affections of the joints, &c. and finally that destructive malady gonorrhœal ophthalmia. Mr. Travers remarks that the gonorrhœal poison, like the small pox, is communicated to the fœtus in utero by an infected mother, and likewise to the infant at the breast. Ulcerations of the mucous membrane of the nares, eyes, mouth, pudenda and verge of the anus, with papular eruptions and blotches upon the skin of the infant are the more ordinary symptoms. They yield to the hydrag. c. cret. three or four grains night and morning. The succeeding directions with regard to treatment conclude the subject of gonorrhœa.

"Purgatives, sudorifics, diuretics and mucilaginous diluents, rest, and frequent tepid ablutions more than half cure the disease by removing the cause. Over the running no medicine has any power to be compared with the copaiba. Of injections, when the discharge is gleet, none are equal in my experience to those in common use, of lead, copper, and zinc. The inflammation of the cervix vesicæ, spasmodic stricture, swelled testicle, phymosis, with irritable sores at the corona glandis, thickened and ulcerated prepuce, burrowing abscesses between the bodies and integument of the penis, and warts, in nine cases out of ten, are consequences of inattention to cleanliness, or exasperation from a totally wrong treatment in the early stage of the complaint.

"Neither the sores nor the secondary effects of the gonorrhœal poison require more than the alterative tonic action of mercury; by its full action they are impeded, as

it irritates and depresses the system disadvantageously. I will not say that the constitutional symptoms may not be cured without mercury; but the result of my experience is that the gentle action of that medicine, such as is given by Plummer's pill, the oxymurias hydrarg., and in some feeble systems by the hydrarg. cum cretâ, so materially expedites the curative process, that independently of any specific efficacy, real or supposed, I avail myself of its assistance. I am guided by its influence on the disease as to the extent and continuance of its use. The disadvantages of slowness in the cure and a continual tendency of the disease to relapse, or reappear in a new form, long since compelled me to abandon as a general principle, that of treating these cases without mercury. The sarsaparilla I almost invariably give at the same time in substance and decoction simple or compound; and in cases so slight, that I think the alterative not called for, or perhaps already sufficiently administered, I give with it free doses of the diluted nitric acid, with or without an equal portion of the tincture of henbane.

"If much irritability is present, especially in the throat affections, the sublimate, combined with small doses of the extract of conium or opium is an inestimable form, and where constitutional debility prevails, the hydrarg. cum cretâ with a little rhubarb or Dover's powder, as the case may require. The indication of treatment is twofold, alterative and tonic; if much pain and irritability be present, a sedative should be added. The readiness with which the disease yields to this plan, steadily supported, it is most gratifying to witness."

LUES OR SYPHILIS.

Mr. Travers attempts with considerable ingenuity to prove, that the gonorrhœal and venereal poisons differ only "in the degree of their intensity and the extent of their operation." We have said that his arguments are ingenious, but to us they are far from conclusive, indeed had we a mind for polemical discussion we think it would

not be impossible to prove them fallacious. But since arguments on these subjects, when sown upon paper, breed disputes as countless as the warriors that sprung from the dragon's teeth, we shall decline them altogether. We do so on the present occasion with the less reluctance, as a revival of the Hunterian affinity between gonorrhœa and syphilis is not likely to be readmitted into favour without keen examination.

For thirty or more cases of gonorrhœal sore, we now have but one of eating chancre, and the question arises—to what ought this to be ascribed? Let Mr. Travers answer it.

"Judging from the records of history, there is much reason to believe that in the course of centuries the disease has been essentially altered in character, and certainly it has been subjected to no influence so direct and powerful as that of mercury. It is perhaps, as much because that remedy has formerly been so indiscriminately and freely employed, as of late years so sparingly exhibited, that we find the disease comparatively so little formidable. There is, however, ground to believe, that what we may have gained upon the disease by mercury, has been obtained at the expense of life and limb. The poison has been bereft of its virulence at the cost of the constitution, and for the cure of syphilis in an individual, scrofula has been entailed upon his posterity."

Another important fact is the daily amalgamation between the syphilitic and gonorrhœal sores, an amalgamation which is throwing down the barriers of distinction between them, if indeed they are not already shattered; and which renders the administration of a certain proportion of mercury "unquestionably the safer practice in all sores." This admission on the part of Mr. Travers is a significant illustration of our remarks, and an ample apology for not having taken up the gauntlet.

"The great distinction of the syphilitic ulcer, primary and secondary, from the gonorrhœal, is that the inflammation of the former is deep instead of being superficial

and erythematous, and the colour is so intense as to approach lividity. The ulceration is exceeding or depascent, instead of herpetic, extending equally and rapidly both in depth and circumference. Formerly I have seen two-thirds of the glans penis disappear in less than a week in acute cases; but these are now rare. Central sloughs are formed, but it is not by sloughing that it extends; the edges are sharp and abrupt, not shelving. The syphilitic ulcer has none of that shifting character which belongs to lupous, carcinomatous, and cachectic sores, viz. cleansing and cicatrizing in one part and spreading in another. Its extension is in a direction from the surface. It is only when exasperated by local irritants or stimulating regimen, and that in a debilitated habit, that the syphilitic ulcer turns sloughy; its character is purely ulcerative, not gangrenous phagedæna."

Mercury is the specific, but two states of constitution absolutely prohibit its immediate use;—1st. excessive inflammation; 2d. excessive weakness. In the first the usual antiphlogistic measures are required, and in the second the extract. sars. dissolved in the decoction, or if a higher tonic be required, the same with bark, and a free allowance of nutrient food, wine, or porter.

"If ulceration is making rapid strides the better plan is to introduce the remedy by the skin in frictions, night and morning; and if the system resists its entrance, to aid the process by the pill. In cases of great debility, I begin with the oxmuriate or the the mercury and chalk, as a test of the capability of the system to bear it. The anodyne, if need be, and the tonic of course should be continued. In most cases mercury and bark or sarsaparilla are exhibited with excellent effect at the same time. In ulcers of the throat, fumigations are of the greatest efficacy. I often depend upon them alone in weakly persons, while other medicines are directed to the support of the system. They effect an improvement more rapid in these cases than the constitutional action alone. I should say generally, that to render the action of murcury powerful

over the disease, and to preserve the system from its injurious operation, the support of the patient's strength becomes the principal object of the surgeon's attention. Indeed, the successful treatment of the disease turns chiefly upon his knowledge and consistent pursuance of this indication."

The treatment of venereal ulcers requires the same attention to prevailing character as other sores; excessive irritability is best allayed by a saturated watery solution of extract of opium. In sloughy ulcers of the throat the linimentum æuginis is most effectual. We need not advert to the secondary symptoms, but may conclude this part of the subject, by stating in our author's words, that the profuse and wasting action of mercury is *never* called for.

COMPOUND OF SYPHILIS AND MERCURY.

Such a combination, especially when aggravated by the presence of scrofula original or engendered, gives rise to cachexie of the most formidable kind. Cold and dram drinking are the ordinary exciting causes, the abuse of mercury and the dregs of syphilis the predisposing. Excepting the eczema, a species of ecthyma, and the impetigo rodens, Mr. Travers has no acquaintance with eruptions proper to mercury as a single agent. That mercury has been frequently used to an injurious extent, he admits without hesitation, but still he objects to the terms 'mercurial eruption,' 'mercurial sore-throat,' 'mercurial pains,' as equivocal in meaning and therefore improperly used.

"From this source are doubtless derived the caricature portraits of the venereal disease abounding in the records of medicine and the reports of empyrics; and I may add the cases, not now so numerous as formerly, of direful and sometimes fatal deformity in the foul wards of our hospitals. The emaciation, pallor, fetor; the deep, eroding, foul ulcers; the worm-eaten bones, as of the whole cranium; the rupia in the form of conoidal limpet-shell crusts covering the body; the continuous slough of the whole posterior fauces, extending beyond sight; the entire loss of the parts of genera-

tion; of the soft and hard palate, and the falling in of the nose; the agonizing night pains, the severe hectic fever and excessive and offensive sweats, &c. sufficiently characterize these cases. Their termination is ordinarily in phthisis or hæmoptysis, or some special visceral disorganization. No remedy, next to the adjustment of a diet as generous as the patient can take, is equal to the extract of sarsaparilla in these cases. The infusion of the root in lime-water is a form admirably adapted to a weakened stomach, and with this fresh milk may be advantageously combined in equal proportions; but the extract dissolved either in its decoction, in milk, or in lime-water, to the amount of half an ounce per diem, or more, is the restorative upon which I rely in these cases. Its power is most extraordinary, more so than that of any other drug with which I am acquainted. *To regard it as inert, as a mere diluent or an offensive nutrient, is either a proof of a very limited experience or a very prejudiced observation.* It is in the strictest sense a tonic, with this invaluable attribute, that it is applicable to a state of the system so sunken and yet so irritable, as renders other substances of the tonic class unavailable or injurious.

We have taken the liberty of marking in italics the passage respecting sarsaparilla, because we most cordially concur with Mr. Travers in the sentiment which it contains. To consider sarsaparilla as an inutile lig-num, a thing no better than saw-dust, appears to us to be the acmé of prejudice, the wild fanatic scepticism of a book-learned theoretic. But our space is nearly consumed, and yet we are unwilling to close this short review without enriching our pages with a graphic description of a frightful form of venereal affection; it is the 'Swan-alley sore.'

"I shall avail myself of this opportunity to notice a peculiar and very formidable distemper, arising from the unlimited intercourse of young and delicate girls of scrofulous temperament, chiefly with foreign sailors, many of them lascars or men of colour, frequenting the brothels in the vicinity of the East and West India and London Docks.

The district of St. Catherine's (until recently converted into docks) was the most notorious for the propagation of this pestilence, and a place in that quarter called 'Swan Alley,' has given the sore that appellation in St. Thomas's Hospital. The subjects of the disease are almost exclusively females. I remember only one instance of a boy similarly affected, in whom the disease went unchecked to a fatal termination. The girls are slender, with very thin fair skins, and often light hair, and generally from 15 to 25 years of age. They have been a few months before decoyed by the Jews who keep these houses, and are systematically on the look out in the great neighbouring thoroughfares. The girls newly arrived in London, while in search of lodgings until they procure places, become victims to these miscreants.

"They receive the visits of as many men as there are hours in the day, and are supported on scanty food and abundance of gin. Their visitors do not always restrict themselves to natural connection. When they become constitutionally ill, their keepers send them to the hospitals. The Magdalen ward of St. Thomas's is seldom without one or more of them. They have been only two or three days in the house, when the character of the sore displays itself, for by reason of the previous illness they are rarely detained in their occupation long enough for the ulcer to have assumed its genuine features. It is a circumscribed irregular ulcer with an inflamed blunt edge, usually situated at the lower angle of one labium, or in the cleft of the nates. When the sore inflames, its edge acquires a dark crimson colour to some distance around; the surface is covered with a deep, tenacious, ash-coloured slough, and it extends so rapidly, as to be increased visibly from day to day. It is generally attended with excessive unremitting pain, a very rapid and contracted pulse, great paleness of the surface, total failure of the appetite, and great depression of strength and spirits. It is, in fact, acute gangrenous inflammation. — Where they recover, no secondary symptom of lues appears; nor is the disease in any

degree contagious. The treatment now adopted seldom fails to arrest it, unless admitted in a very advanced stage, as after the sloughing process has been some time established when the devastation is truly terrific. In addition to the slough of the pudendum, I have seen the entire lower opening of the pelvis deprived of its soft parts. The girl dies typhoid with a dry black tongue, and is first delirious, then comatose.

"When the pain is severe and the disc of inflammation strongly marked, blood-letting is beneficial to both. I usually apply lint soddened in a saturated solution of the extr. opii, over this a poultice of linseed meal, and cover the whole with a fomentation flannel. This seldom fails to relieve, if not to remove the pain. The exposure of the sores and the change of dressings much augment it; the continued application of warmth and moisture as much abate it. After clearing the bowels with castor oil, I gave a draught of camphor julep with a drachm of ether, and ten minims of the tinct. opii every four hours; and half a grain of opium additionally, if the pain is very urgent. If the slough is fast and the ulcer extends, the surface is washed freely with the strong nitric acid, and it is remarkable that very shortly afterwards the girl expresses great relief. The London treacle poultice I likewise find an excellent application, covered by the fomentation flannel. The object to be looked to for directing the application, is the colour of the surrounding skin; when this pales, the dilute nitric acid lotion, ten drops to an ounce of water, is the best application. Fresh eggs and milk, and as the stomach acquire tone, a mutton chop, and from ten to twelve ounces of port wine daily, are an appropriate support. The occasional repetition of the oil or the common enema should not be neglected under the habitual employment of opium.

"The strong acid must be repeated each third or fourth day, till the whole surface granulates. When the girl sleeps and takes nourishment, notwithstanding an immoderately quick pulse, she does well; and the sore, when once clean, heals rapidly under

the dilute acid lotion and simple cerate. The bark is useful at this period, but very secondary to the opium, wine, and nutriment. The former should be gradually reduced. A lotion of the chloride of lime and caustic soda, three drachms of the first and one drachm of the last to half a pint of water, acts with magical celerity in clearing the sloughs in many cases; but I have not found it so applicable or efficacious during the stage of acute inflammation, as when it is subdued. I once saw mercury rubbed in to rapid salivation, with manifest acceleration of the destroying process, and the vital powers were further greatly sunk by it. I have seen the inflammation begin after the taking of half a dozen blue pills, one every night and morning, which had been prescribed upon the girl's admission for a sore, which was then small and indolent, in ignorance of its character and tendency."

Mr. Travers believes that this sore is neither the result of the irritation of the matter of gonorrhœa, nor merely a local disease. Bad constitutions, incessant local stimulus, want of clean linen, and the substitution of burning spirits for proper nutriment, induce as soon as ulceration appears this gangrenous phagedæna. The last point mooted by our able author is the origin of the venereal. Now we should just as soon dream of sailing to Cat Island, and invoking the manes of the Aborigines who first saw with wonder the Spanish caravels emerging from the bosom of the Western Ocean, as of ripping up this long-disputed question. It is very well for gentlemen with some leisure and much learning, but for us—morbleu! It would be perdition. We cannot conclude without expressing the gratification we have derived from perusing this little Essay of Mr. Travers' of which we have now extracted the marrow for our readers. We beg Mr. T. to accept our best acknowledgments.

XI.

CASE OF SUPPOSED CHRONIC ARACHNITIS.

THE following case is related by Dr. La Roche in our valuable trans-Atlantic contemporary, the *North American Medical and Surgical Journal*, for January of the present year.

M. E. G. æt. 60, of muscular frame and nervous temperament had long been subject to dyspeptic and hypochondriacal symptoms, and attacks resembling hysteria. His habits of life were, Dr. La Roche believed, regular, but six or seven years ago he was seized with an unusually severe paroxysm of nervous irritation, accompanied with slight delirium. A year ago when in Holland he had a still more violent attack, which would seem to have been considered as allied to delirium tremens, for it was treated successfully by opium. From this time till early in October Mr. G. enjoyed tolerable health, but he was then observed by his friends to become morose, avoid company, evince an occasional loss of memory, and complain of rheumatic pains in his lower extremities.

"At last, on the 19th of October, the explosion took place. I was called to see him at twelve o'clock of that day, and found him as follows: The muscles of his extremities were all in motion; he was unable, on this account, to remain on his feet or to walk. He could hold nothing in his hands, and it was with the utmost difficulty I could steady one of his arms sufficiently to feel his pulse. While holding my finger on the artery I could perceive a vibratory and continual motion in the muscles. His mind was perfectly sound, though his speech was rather more abrupt than usual. He had not slept the night before, and attributed all this agitation and a little heaviness over the eyes to this circumstance. His eyes were not affected by light: the head and indeed every part of the body was free from pain; but on sitting in bed he experienced some giddiness. The tongue was of a natural colour on the sides and tip, partaking a little of the trem-

bling and agitation of the other muscles, and was slightly furred in the centre. He complained of thirst—loss of appetite; pulse about eighty, and rather hard and full; skin covered in parts with perspiration, but of natural temperature. He conversed gaily about his agitation, and related to me all I have stated above concerning his former attacks."

The patient objected to depletion and some opening medicine with abstinence were ordered, followed by mustard pediluvia, and night pills of camphor and acetate of morphia. On the next day he was so much better as to be found by the physician reading the newspaper, but the agitation of the muscles still remained. The sedatives were repeated, but towards evening he felt his hallucinations coming on, and accordingly next day they were fully established. Troubled images of dogs, cats, and men floated almost constantly before his eyes, the pulse became active and tense, and the tongue foul. Like persons affected with the mania à potu there was an odd mixture in the case of positive aberration and a knowledge of the unreal nature of his fantastic imagery. Depletion was refused, and infusion of senna with valerian was employed as a purge, with the application of cold to the head. The medicine operated well, and the patient appeared to be better, yet an oddness of manner remained, and thirty grains of assafœtida with two of acetate of morphia were prescribed, one half to be taken at bed-time and the other half in an hour if sleep was not procured. He retired to his room, but at 3. a. m. next morning jumped out of his window on the third floor, having previously locked his door for that purpose. Another physician prescribed a dose of laudanum after this occurrence, he fell into a quiet sleep, but this was even longer than the dreamer Nourjahad's, for he never woke again!

"On opening the cranium a large quantity of fluid escaped. The arachnoid on both parietal, as well as on the upper regions, was found thickened, and in some places slightly opaque. Other parts of this membrane, as also the pia mater throughout,

were highly vascular, and between them there was discovered a considerable serous effusion. The substance of the brain was much softer and more vascular than usual. The ventricles contained a large quantity of fluid, and were, especially the left, morbidly enlarged ; so much so indeed, that Dr. HORNER and the rest of us were inclined to believe the subject must have suffered at one time from a chronic hydrocephalus. The cerebellum was also very vascular, but presented no unusual appearance. At the lower edge of the falx the dura mater was found ossified in a circumscribed spot.

*"Back—*On making an incision over the spine, from the neck to the sacrum, a considerable effusion of blood was seen at the lower part of the spine and beginning of the sacrum, not perceptible by any discolouration or swelling externally on the skin. No fracture of the spine could be discovered, and the spinal cord was found healthy throughout.

"Abdomen. On raising the intestines, a very extensive effusion of blood was visible under the peritoneum. This cut, the blood was seen partially coagulated over the region of the iliac veins, extending somewhat upward ; but more particularly down into the cavity of the pelvis. No rupture of a large vessel was perceptible, so that we were led to infer that the blood proceeded from the rupture of several small veins.

"The stomach was somewhat distended, and contained a quantity of fluid, which, from its appearance and smell, could be easily recognized to be the wine and water and laudanum that had been administered an hour before death. The inner surface of this viscus was of a light ash colour, and the mucous coat so softened in its whole extent, that it was with the greatest ease scraped off with the handle of a scalpel. A portion of the mesentery was ruptured, and an effusion of blood was found between its laminae. The liver was white and small.

*"Thorax.—*A large ecchymosis was found in the substance of the diaphragm. The

right lung was healthy in its whole extent. In the anterior portion of the left, a cicatrix of the size of half a dollar was discovered ; around it a few aborted tubercles were situated. On neither side was there any adhesion of the pleura."

Dr. La Roche in his remarks on the preceding case, rather coarsely expresses his astonishment that it should "never have entered the heads of this patient's physicians for a minute," that the symptoms depended on an inflammation of the meninges. "Yet dissection," says the Doctor, "revealed to us the existence of a chronic inflammation of the arachnoid, which in all probability was the result of the acute forms of the disease supervening at every repetition of the complaint." Now we are by no means so certain of the truth of these statements as Dr. La Roche, for neither are the evidences of chronic inflammation of the arachnoid indisputable, nor the occasional attacks of acute inflammation of the same undeniable. An increased quantity of serous fluid, and that to a considerable amount, between the arachnoid and pia mater may exist without any inflammation of either, and for the confirmation of this statement we appeal to all who are in the habit of opening many bodies. We affirm that in two cases out of four, an effusion of serum to some extent between the membranes in question will be found after death. Neither is the enlargement of the cavities of the ventricles, a positive sign of arachnitis, on the contrary such enlargement is most frequent in dropsical patients, and independent in many instances of any thing a-kin to inflammatory action.* We demur then, for these anatomical reasons, to the opinion that arachnitis necessarily existed, and our doubts are increased by the history and progress of the case. We grant that there was an excitement kindled up from time to time within the head, but

* The violent death of the patient would prevent our pinning any faith on the partial vascularities observed in the cranium.

we question whether the symptoms would not have been exasperated by *active* depletion. The tendency to *serous* collection within the ventricles and between the membranes is certainly given by maniacal affections, by delirium tremens, and maladies of that class, and experience has proved that though local depletion and counter-irritation is often beneficial, the bold treatment adapted for phrenitis is positively mischievous. One word with regard to purgation. We have witnessed violent attacks of maniacal delirium threatening to end fatally arrested by the sharp and drastic purge of calomel and scammony. Of course there is no novelty in this observation, as it was the purgative quality of hellebore, that established its fame for the cure of madness in the ancient world.

XII.

OBSERVATIONS ON THE SEROUS EFFUSION INTO THE HEAD WHICH OCCURS IN OLD PERSONS.*

The object of the writer of this article, M. Bosc, Interne des Hôpitaux, is to prove that paralytic patients are often carried off by serous effusions into the head, and to endeavour to ascertain the symptoms which distinguish such serous effusions from others. The points to be proven are, 1st. That serous apoplexy is seldom an idiopathic affection, but consequent on organic alteration of the brain or its dependencies; that it may supervene suddenly, and without precursory signs; and that it may be accompanied by symptoms which either denote or render probable its existence.

Case 1. Bicêtre Hospital, 1827. An old man of 60, weak and worn out by age and misery, had been for two years affected with hemiplegia on the left side, which appeared suddenly without any constant precursory pains in the head. One day the patient be-

came all at once insensible, the mouth was distorted, stertor was established, and the right side was agitated by convulsive movements. He died in a few hours.

On dissection the traces of an old apoplectic extravasation were found in the right optic thalamus and corpus striatum, and the left ventricle was greatly distended by limpid serum.

Case 2. Pitié Hospital, 1828. An old man, of nearly the same age as the former, having the same habit of body, but hypertrophy of the left ventricle of the heart, in addition, was suddenly seized in 1826, with deafness, imperfect paralysis of the left arm, and temporary incomplete loss of sense. Some time after this he felt his legs gradually bend under his weight, and the upper limbs become affected with agitation, which successively increased; he suffered, in short, from paralysis agitans. The loss of motion in the left arm continued, and formication was occasionally experienced in the limbs, when suddenly one morning he fell into a state of partial insensibility accompanied with much agitation of the limbs, and died in a few hours.

On dissection there was found a small apoplectic cyst, lined by a membrane secreting a yellowish matter; white softening of the anterior part of the spinal marrow from the fourth pair of cervical nerves to the second pair of dorsal: the ramollissement occupying the two anterior thirds of the medulla, the substance of which was transformed into a whitish uniform bouillie; an abundant quantity of serum between the membranes of the brain and in the ventricles, which were much distended.

In this case the old apoplectic extravasation produced the incomplete paralysis of of the arm; the ramollissement of the cord, the agitations of the limbs; and the serous effusion the apoplectic symptoms with which the drama was brought to a close. Such at least would seem to be the dicta of human experience. We have remarked in former articles in this journal, that hemiplegia is more frequently connected with partial extravasations of blood, than universal loss of

* Archives Générales, Tome xxii. Février, 1830.

sensibility and the state of perfect apoplexy. This observation is confirmed by the present cases, and by daily experience, and hence it is that hemiplegia is seldom fatal in the first instance. We this day witnessed the examination of an elderly female, affected with hemiplegia after a fit unaccompanied by total loss of consciousness, in whom there were the remains of as many as five apoplectic extravasations more or less considerable. The immediate cause of her death was extensive serous effusion in and on the brain, and a latent or nearly latent peripneumony. The second proposition of our author runs:—that convulsive movements of the limbs may be absent in cases of serous effusion, and death may not be its necessary consequence.

CASE 3. *Pitié Hospital*, 1823. A man, ætat. 45, had for several years been affected with incomplete paralysis consisting of feeble contractility of the muscles, and occasional deafness. He was treated with some benefit and left the hospital in which he was, but two or three days afterwards having joined a drinking party he was seized with apoplexy, abandoned by his companions in the public streets, and not brought to La Pitié till the following day. At this time he was in a perfect state of coma and insensibility, without power of moving or sense of feeling in any of his limbs, which were not in the least contracted. The face was red, but not distorted. Antiphlogistics and derivatives succeeded in arousing him so far that he was able to relate his previous history, but gangrenous erysipelas of the leg supervened, and the patient died eighteen days after the apoplectic seizure. On dissection there was found a great quantity of serum between the arachnoid and pia mater and in the ventricles of the brain. The spinal arachnoid had been in a state of chronic inflammation, for from the 5th cervical vertebra to the 6th dorsal there were streaks of false membrane of a blackish colour, a reddish serum in the cavity of the arachnoid, and softening and injection of the spinal marrow in its anterior part.

If we compare the foregoing cases, says our author, we must be struck with the following points of coincidence—1mo, the existence of a more or less ancient organic lesion; 2do, recent apoplectic symptoms; 3tio, alteration of the cerebral substance, with abundance serous effusion. In the last two cases the effusion was produced by disease of the medulla spinalis, was between the membranes and in the ventricles of the brain, and gave rise to general paralysis. In the first case, on the contrary, the palsy was confined to one side of the body and the effusion was into the opposite ventricle.

The third and last proposition of M. Bosc, asserts, that convulsive movements accompanying apoplectic symptoms, do not certainly indicate serous apoplexy; they only render its existence probable in so far as the individual is a paralytic.

CASE 4. *Salpêtrière Hospital*, 1829. A woman suddenly lost her consciousness, became paralytic on the right side and presented contractions and convulsions of the left arm to so violent a degree, that restraint was necessary. Bleedings, derivatives, &c. were employed but the patient died on the 5th day.

On dissection an apoplectic extravasation was found in the left optic thalamus and posterior part of the corpus striatum, from which it had penetrated the corresponding ventricle. The more fluid portions of the blood had passed through the foramen of Monro into the right ventricle in which it had accumulated. No other morbid appearances were discovered in the brain.

This case is an example of what not unfrequently occurs in apoplectic attacks, and in the artificial apoplexies produced by injuries of the head, we allude to palsy of one side and convulsive contractions of the other. The palsy is generally on the side opposed to the pressure on the brain, the contractions on the same as the latter. Several explanations of the fact have been given by authors, but none of them are very satisfactory. In the present instance M. Bosc attributes the phenomenon to the escape of

the fluid parts of the blood into the ventricle opposite to that in which the extravasation had taken place. After all, we are not convinced of the accuracy of the diagnostic symptoms of serous effusion, nor do we think it possible in some instances to distinguish during life between it and venous congestion. We are convinced, however, that serous effusion is a very frequent mode of terminating the lives of those who have laboured

under palsy, or any organic affections of the brain of a chronic character. Effusions into the head and latent peripneumony seem to us to be the general dénouement of the drama, in patients affected with irremediable, though not absolutely in themselves fatal maladies. It is for the purpose of putting this fact in a clearer light that we have thought it worth while to notice the present paper.

CLINICAL REVIEW.

XIII.

BALTIMORE ALMS-HOUSE INFIRMARY.

In No. VIII. of the American Journal of the Medical Sciences is a report of cases by Dr. Wright, physician to the above institution. We extract one or two of the more interesting.

I. LARYNGITIS.

CASE 1. *Cynanche Laryngea*:—"Samuel Morgan, aged forty-three, tall, spare person, florid countenance, light eyes and hair, admitted January 15th, 1829, suffering under the chronic consequences of what he termed a bad cold, contracted some weeks before. He was very hoarse, almost without distinct voice, short dry cough, not frequent, no pain in any part of the breast, no difficulty either in common breathing, or on making full inspiration. There was no fever in the general, though the patient before coming to the Alms house, had laboured under an irregular intermittent, which still occasionally recurred. The pulse commonly small, without frequency, and soft, tongue clean, appetite moderate, bowels regular, evacuations of ordinary character, no evidences of gastric derangement. The main features of the case, in short, were made up of the peculiar hoarseness, dry cough, and considerable general debility; tracheitis, now chronic, with some bronchial concern,

seemed the primary and still predominant affection, to which all the other symptoms, the general debility, and probably the intermittent also, held a dependent relation."

Under the use of alteratives internally, with counter-irritation over the top of the chest, the patient improved so far as to be able to leave the house in the second week in February.

"On the twenty-fourth of the same month, twelve days after being reported for work, I found Morgan again in the hospital. He was now acutely ill; his face flushed, of a purplish hue, countenance betraying great distress, breathing slow and difficult, often causing a struggle for breath, in which he would raise himself on the bed, throw his head back as far as possible, and bring into forcible action every muscle concerned in opening the chest for admission of air. Just before and after one of those severe struggles for inspiration, he made violent efforts to throw off masses of ropy mucus which seemed to fill the posterior fauces, and choke the passage of the larynx. The entrance and expulsion, particularly the former, of air through the larynx, was attended by a loud sound, of that peculiar rough, ringing character, sometimes called metallic, so eminently characteristic of extreme spasmodic or inflammatory narrowing of the apertures of the glottis and larynx. The act of swallowing was somewhat hindered and painful, though far less embarrassed than the respiration. The external aspect

of the throat, not less than other symptoms, shewed the character, and in some degree the extent, of the affection which had brought the unfortunate patient into so much distress and danger. The body of the larynx in front, with the corresponding portion of œsophagus behind, were swelled out into a globular form of much more volume than the natural state of the parts, the surface of the tumour, and the whole front of the neck, having the same dark red hue as the face, and the enlargement possessing great hardness and sensibility to the touch. The pulse was small, quick, and weak, having neither tension nor firmness. The report furnished by the resident students was, that the man had been brought into the ward the night preceding, with the symptoms just described, but of less intensity; that he was then chilly and depressed, and seemed incompetent to bear active treatment by direct depletion, but had been freely vomited, and had taken a mercurial cathartic."

The smallest-sized cupping glasses were applied in quick succession to the seat of tumefaction, and a draught of infusion of seneca, tartrate of antimony, in small portions, oxymel of squills, and compound tincture of camphor exhibited at short intervals. The patient also inhaled the vapour of hot water in which chamomile and serpentaria had been infused, with great relief. When the cupping-glasses were removed the scarifications bled freely, and on the subsequent application of a blister the local hæmorrhage was rather considerable. The consequence of this free local depletion was complete relief to the swallowing and breathing, and after a few days cordial nourishment and light tonics were administered with the effect of producing a permanent cure.

CASE 2. *Chronic Laryngitis*.—Margaret McCarthy, æt. 42, of robust constitution, admitted May 10th, 1827.

"Respiration sonorous, and somewhat laboured, but not painful; voice a hoarse whisper; no fever; cough occurring in paroxysms somewhat severe, without expectoration; pale countenance; not much emaciation;

no particular debility, nor other signs of general bad health. In February preceding, she had been attacked by symptoms of croup, as she reported, and was dangerously ill for many days. She recovered slowly, with the alteration of voice, embarrassed respiration, and cough above described, which symptoms continued ever since, and had undergone occasional exacerbation, by cold, fatigue, and other disturbing causes.

"The patient had been but a short time in the infirmary, before an acute attack of her disorder supervened. She had been out of the ward for a few hours in the day, and at night complained of feeling chilly and unwell; in the course of that night her breathing became difficult and painful, with a feeling of great stricture across the top of the thorax; inspiration was impeded, and soon became extremely laboured and anxious, attended by a loud and peculiarly harsh croaking sound, which was audible in every part of the hospital. A paroxysm of coughing occurred at intervals, and distressed the patient very much; it was abrupt, renewed rapidly for some seconds, and of a sharp thrilling kind, as of air forced with great impulse through a tense narrow passage. There was no expectoration, except that sometimes after great effort in coughing, a considerable quantity of colourless, ropy fluid would be suddenly thrown off, by an act of strong expiration, amounting nearly to vomiting. The patient's countenance was pale, and betrayed much distress.—Pulse small, quick, and soft; temperature of the body rather low.

"The treatment of this severe paroxysm, consisted in the exhibition, at intervals, of the camphorated julep, with tinct. opii and æther; liberal demulcent drink, an epispastic to the thorax, and a light, warm cataplasm of flaxseed, chamomile, and spirit of camphor to the front of the neck, with bottles of hot water to the lower extremities. The symptoms of cynanche anginosa gradually passed off, and in 48 hours the patient was in her previous state, except some general debility. Paroxysms similar to the one

just described were frequently renewed, commonly ensuing to some exposure or change of weather. In the course of three months she suffered not less than six or eight such attacks—usually of thirty-six or forty-eight hours' duration—without any sensible impairment in the intervals of her general state of health; the paroxysms always breaking up with a discharge of large masses of uncoloured gelatinous matter. Great efforts were made to alter the state of parts which kept up the liability to those sudden attacks, with their train of terrible symptoms. The patient was put on a guarded mercurial course; small doses of calomel in combination with guaiacum and cicuta; with the employment, as liberally as possible, of tartarized ointment, over the upper region of the chest, and a succession of blisters kept open in front of the trachea; her diet was regulated, and bowels kept soluble. Once or twice her mouth was rendered slightly sore by the calomel, and during the continuance of that impression, the patient thought her breathing was much more free; but one or two severe seizures occurring after what was considered a full trial of mercury, it was withdrawn altogether, and various means afterwards employed. The plan of counter-irritation was frequently renewed, and having sometimes procured great advantage from the steady exhibition of copaiba, in the atonic forms of bronchitis and catarrh, an emulsion of that article was employed in the present case after the mercurial alterative experiment was given up.

“While under the balsam course, with counter-irritation externally, the patient had less cough, enjoyed longer immunity from acute attacks, breathed better, and was in many respects more comfortable; but still her voice was rough and stifled, and slight impressions of cold or damp brought on some degree of that harsh, stridulous, croaking kind of inspiration, which became so exalted and predominant in the severer paroxysms. On one occasion, when this woman had been in the yard of the alms-house, after a day of cold rain in August, she was affected at night with the usual symptoms

of a suffocative attack. In this instance, the bad symptoms exceeded their common intensity; the usual palliatives, diligently applied, failed to give relief, and the patient expired suddenly, in twelve hours from the incursion of the paroxysm.

“Examination Eight Hours after Death.—

Along the anterior surface of the trachea, somewhat on its left side were a number, five or six, round bodies, from the size of a pea to that of a marble, lying loosely. Those bodies were of dark colour, part quite black; from their place and manner of distribution, they appeared to be the external bronchial glands degenerated. They were of soft pulpy consistence, the black bodies of the same colour within as on the outer surface. At the great division of the trachea, directly in the bronchial angle externally, appeared a round body, of dark red colour and considerable magnitude, about the size of an English walnut, the mass was dissected out, and felt firm and heavy. On attempting to cut through the middle of the body, its complete division was prevented by the resistance of a hard substance within, and a partial section only mad. The body now presented a three-fold constitution; the external matter, for a quarter of an inch was dark red, then a layer of greater thickness, quite black, while the centre of the body was a hard, white, calcareous substance, supposed to weigh one drachm. The whole mass, like the bodies along the line of the trachea, seemed to be a morbid enlargement and conversion of the small glands usually occupying the external bronchial angle.

“The interior of the trachea was very pale, except just before its branching, where there was a florid patch, an inch in extent. The inner surface of the rest of the tube, up to the thyroid space, was not only without colour, but its mucous membrane so thin that it could not be certainly distinguished, and the cartilages seemed without any regular interior covering; nothing of the sort appearing, except a few filaments stretching across from one ring to another; yet there were no marks of distinct ulcerous waste in any part of the tube. There was no fluid of

any kind in the trachea, until opening its primitive branches; these were found filled with the sameropy mucus which the patient had occasionally discharged in former attacks. The mucus found in the bronchial tubes was of brownish colour. The posterior part of the trachea, opposite the thyroid cartilages, was of almost cartilaginous firmness, and more than an eighth of an inch in thickness. The interior capacity of the trachea between the thyroid cartilages was very much contracted, leaving a triangular chink scarcely sufficient for the passage of a straw. The space of the larynx above the thyroid cartilages was also greatly narrowed, by thickening of the lining membrane, and more particularly of the reflection forming the rima, (the borders of which were hard and chord-like,) and the covering of the ventricular portion or appendages of the larynx.

"The lungs appeared sound. They were throughout expansible and crepitous, but heavy and dark-coloured, shewing great venous congestion. The patient died, probably rather of suffocation from the loaded state of the bronchial tubes and cells, complicated with strong spasmodic irritation of the larynx, than from any acute derangement or lesion. The mucus with which the bronchial passages were all filled, up to the great division, was so viscid that none of it would flow out by gravitation, and only small portions could be extracted mechanically."

The anatomical description of our author is not particularly clear, but still we think we gather enough to conclude that the organic lesion was not great. We regret that no mention is made of the state of the heart and large vessels, for if they were sound, we see no reason, on the face of the account of the dissection, why tracheotomy should not have been effectual in bringing relief to the breathing. The application of the stethoscope and employment of percussion is of much value in such cases, from the assistance they convey to us in ascertaining the condition of the lungs.

II. AFFECTIONS OF THE HEART AND ARTERIES.

CASE 1. *Chronic Carditis—Hypertrophy with Condensation.* Ann Lee, æt. 26, tall and rather pale, admitted June, 1827.

"Temperature of the surface natural; skin soft; pulse 85, very small, not sensibly irregular or unequal; no fever or rigors; countenance pale; complexion a little sallow; eyes clear. Encephalon. No headache or vertigo; senses perfect; mind calm. Gastric system. Tongue clean; slightly lymphatic in the centre; no decided character of irritation; stomach not deranged in sensation; no morbid sensitiveness about the epigastrium; appetite commonly good; bowels regular; dejections scanty. Thorax. No cough; respiration small, but easy in general, the same when lying, sitting, or standing, but quicker after walking or any effort, and checked suddenly, but not painfully, on attempting full inspiration; no pain in the region of the heart, or the muscles of the chest or arm, and the patient could lie on either side, but preferred the left. Abdomen. Belly rather full, too prominent or rounded at the sides, slightly tense, not generally tender; sensibility greatest in the left hypochondrium, as if from a degree of splenitis, or of morbid tenderness in the left portion of the transverse colon; no defined hardness or volume in the part. This was the only acknowledged seat of soreness or pain about the body, and uneasiness, sometimes amounting to pain, was generally felt here, and frequently referred to by the patient. The region of the liver bore pressure well, which did not betray any unusual evolvment of that viscus. Pelvis. Menstruation suspended; no pain in that seat; urine scanty and high coloured, but voided without pain or irritation."

Dated the origin of her complaints to the preceding April, when her menses failed to appear, and since which time her health had declined. The patient was put upon an alterative course of calomel with squill, rhubarb, and canella—her mouth was slightly sore at the end of a week—the urine became free—

and the œdema of the lower limbs nearly disappeared. The mercury was now discontinued, the bowels kept open with a bitter cathartic infusion, and after some time a pill composed of myrrh, assafœtida, turpentine, &c. exhibited with a view to excite the catamenial secretion. At the end of 3 weeks she was so well as to walk about the wards and engage in her occupation of sewing, but after having been out of the hospital for some days she was attacked one evening by rigor, succeeded by fever, dyspnœa, acute pain in the upper part of the thorax, and cough. The pulse was very thick and thready, the patient much agitated, the orthopnœa distressing. Calomel and antimony with Dover's powder were exhibited, and the solution of tartarized antimony in barley-water. The patient passed a bad night, and on the next day was very weak with puffy face, quick thready pulse, inclination to stupor, cough less frequent, no expectoration. A large blister was ordered to the chest, calomel, camphor and ammonia every four hours, and wine whey drink prescribed. No improvement took place during the day, the orthopnœa increased to the utmost degree in the night, and after a few paroxysms of dyspnœa the poor creature sank down and expired suddenly.

"Dissection. The head was not examined. Thorax. Immediately under the upper third of the sternum appeared a considerable mass of recent gelatinous, or lympho-gelatinous deposit, of pale yellowish colour; the surface of the mediastinum and pleura, and for some space around, exhibited the appearances of recent inflammation; the serous membranes of the chest, (except the inflammatory patch described,) as well as the pulmonary surfaces, in their common state; the right lung much shorter than natural; the heart, with its envelope, presented very full in front, occupying the middle region of the thorax, rather than the left side, and appeared, (from the volume and seeming fullness of the pericardium,) to be larger than common; the front border or margin of each lung, was tied to the sides of the pericar-

dium by three or four distinct, strong slips or bands, of fibro-ligament, of evidently ancient formation; the bottom of the left lung cohered extensively, by old adhesion, to the diaphragm, and in a partial degree to the pleura costalis; the parenchyma of both lungs was sound, soft, and crepitous; both pulmo-pleural sacs contained a few ounces of water; the heart, enclosed in its sac, being raised up, felt particularly firm and heavy, and retained its cordiform shape, as if its chambers were filled by some solid matter, while its exterior surface was closely embraced by the pericardium. On making a longitudinal section, to divide the pericardium and expose the heart, nothing of the common distinctness of parts could be found. The pericardium not only cohered to the heart, but was consolidated, or identified with its substance. This union was complete and universal up to the roots of the great vessels. The heart was weightier than natural, and fully equal to the medium size of the bullock's heart. The left ventricle was empty, and remarkably circumscribed, not capable, by conjecture, of containing more than half an ounce of fluid. Its thickness was rather more than an inch, its internal surface of natural appearance; the root of the aorta not sensibly hypertrophied; the semilunar valves soft and natural. The left auricle was of natural size, darker coloured than usual, firmer in its wall than common, but retaining a good deal its soft sacciform character; the mitral valve healthy. The right ventricle was smaller than common, less collapsed than in its natural empty state, no coagula in its cavity, its parietes very firm and thick, like the mass around the left ventricle; the root of the pulmonary artery and its valves sound. The right auricle was uncommonly prominent and rounded, and of particularly purplish-red colour, much darker than the rest of the heart. Its wall was half an inch thick in every part, its cavity did not collapse when cut open, and its whole interior was black and ragged, with short flocculent masses hanging from all the inner surface. The inside of the auricle represented a rough,

ulcerous cavern smeared and blackened with grumous blood. There were no traces of purulent or sanio-purulent fluid in the cavity, and only a few flakes of dark fibrinous matter. When the auricle was cleaned out, its interior surface still exhibited a perfectly ragged, (for want of a better term,) ulcer-like appearance. The tricuspid valve was found entire, but was undergoing calcareous degeneration. On being handled, its chordæ tendinæ cracked and broke to pieces between the fingers.

"Stomach healthy; remarkably small size, not more capacious than an equal extent of the colon. Spleen somewhat enlarged. The intestines and peritoneum natural, except a very blanched and bloodless appearance; some water in the peritoneal cavity, the abdominal aorta preternaturally small. The liver did not occupy more abdominal space than is common, but was twice its natural bulk; and from some cause not apparent, had ascended in the direction of the left thoracic cavity, pressing the diaphragm before it, and occupied fully half the space of that cavity; hence the compressed and shortened appearance of the left lung, before noticed. The liver, though hypertrophied, bore no particular mark of disease; the gall-bladder was small and contained a thin pale green fluid. The kidneys, uterus and bladder natural, the latter of very small size. The ovaries on both sides were converted into a mass of tuberculations, imperfectly suppurated. There were some remains of chronic ulceration in the vagina, the clitoris morbidly enlarged, and part of the labia interna demolished by former ulcerations. Both groins exhibited scars from ancient buboes."

Dr. Wright considers it remarkable that the carditis in the present case should have gone to such an extent without having caused fatal disturbance in the organ and general economy. Now to those who have seen much of these diseases there is nothing remarkable in the matter, on the contrary, it is an every-day occurrence. But we do not hesitate to say, and we speak it advisedly and from experience, that there *were* characteristic symptoms present, nay more, that

the disease *ought* to have been discovered. The sallow puffy face, disposition to œdema, dyspnœa on exertion, pain on full inspiration, preference of one side on lying and tendency to orthopnœa, the small pulse and scanty urine are general symptoms that speak an intelligible language to those much accustomed to these cases. No mention is made of the chest having been stripped, or even of the hand having been applied to the region of the heart. We can say most conscientiously that we have not seen an instance of hypertrophy of the heart and adherent pericardium, in which the action of the organ was not seen and felt more extensively than natural. The stethoscope was not applied in the present instance, and yet we venture to predict that it would have indicated the existence of the hypertrophy with unerring certainty. We never examined such a case in which there was not powerful impulsion and the bruit de soufflet or the bruit de rape, and we have no doubt whatever that such would have been found in this instance, had they been looked for. No mention is made of the patient having suffered from rheumatism, but adhesions of the pericardium are very rare without it. Dr. Wright revives the exploded notion of Corvisart, that the *végétations* in the auricle were caused by the ancient syphilitic affection. We thought that the idea was long since abandoned by all sound pathologists. We might make many more remarks upon the case, but our limits compel us to forbear.

CASE 2. *Aortic Aneurism; Rupture into the Trachea and Œsophagus.*—Henry M'Claskey, æt. 54, very muscular, admitted December 1827.

"The leading symptoms, at the time of admission, were cough, and a constant sense of weight in the chest, increased on exercise, and causing labour of breathing after any considerable effort. The cough was hoarse and dry, without expectoration, not very frequent, not commonly excited or increased by deep breathing, the sense of weight in the chest constant, rather disagreeable than distressing, and not at all

impeding lying down or walking about moderately. The patient represented his present symptoms to have come on about three weeks before, previous to which time he was, or believed himself to have been in good health, had been seldom sick, led an active life, and was free of any aptitude to cough, or other disorder.

"There was no fever, nor febrile temperature of the skin. Examined for many days together, the pulse betrayed no sensible fluctuation; it was sixty-five to seven; soft without volume, requiring pressure to distinguish it well, and not resisting with any energy of stroke; it was both a weak and sluggish pulse, though the latter is usually characterised by some force. The general state of the system corresponded with the torpor of the circulation; the man kept his bed, was silent, and seemed indifferent to every thing about him, his usual position supine, countenance dull and drowsy; when asked respecting his state of feeling, complained of annoyance by his cough, and of the sense of weight in his breast, spoke little, rather abruptly, and always in terms implying despondence of getting better."

The stethoscope was not applied, no diagnosis beyond "chronic pulmonary embarrassment" formed, and a palliative course of treatment, i. e. a negative one employed. Diarrhoea was prevalent in the infirmary, and the man became affected with it to the increase apparently of his cough. One morning he came out of the privy coughing very hard, violent vomiting was heard immediately afterwards, those present ran to the bed, where they found him ejecting blood in torrents, and in ten seconds' time he was lifeless.

"*Examination*.—No extravasated blood in the general cavity of the thorax. The right lung extremely dilated, filling the whole right cavity of the chest, of a deep purple hue, and engorged to the utmost possible degree, not from vascular congestion, but complete injection with blood, of all the bronchial passages and cells, to their minutest divisions: no artificial inflation of the

lung could possibly have caused a more perfect display of its expansive capacity. The left lung was not at all dilated, and exhibited no unusual colour.

"The heart viewed *in situ*, gave but a very partial representation of the nature of lesion, some appearance of a pouch only presenting just beyond the arch of the aorta. The trachea and œsophagus were divided above and brought down, the membranous connexions around the thorax and to the spine separated, and the heart and lungs taken out together. Being now inverted, the state of the parts was readily traceable. At the deepest posterior part of the arch of the aorta, an inch and a half below the root of the left subclavian, was an aneurismal sac, the size of an egg, its parietes soft and apparently very thin. This was plainly the source of the hæmorrhage, and to trace its communications, the sac was slit open through its greatest length. The coats of the artery, (within the limits of the sac,) were very thin and tender, and tore rather than cut when laid open; the sac was empty, except a few delicate layers of soft coagulable lymph. Passing the finger into the sac, it encountered three or four hard, rough, pointed bodies, on each side, within the aneurismal cavity, which were the extremities of three broken rings of the trachea; the points were thin and sharp, as if wasted, and had a roughness, hardness, and brittleness, more of bone than cartilage. The communication with the trachea, and the cause of bloody insuflation of the right lung, were thus explained; it remained to ascertain why the fatal hæmorrhage had occurred in the form of a violent and repeated gush by vomiting. When the œsophagus was now detached from the trachea behind down to the borders of the aneurismal sac, it was found to be united by adhesions both with the diseased portion of the trachea and a part of the aneurismal bag; a farther separation of the œsophagus from the trachea, disclosed an oval opening, in the former, large enough to admit the point of a finger, by which the œsophagus communicated with the trachea, just behind where the rings of the latter had given way, which was pretty

low on the left side of the trachea. The coats of the œsophagus were very much attenuated over the whole extent of its adhesion to the trachea and sac, and the rent described communicating directly with the current flowing into the trachea after rupture of the rings; the blood seems to have passed freely also, by the route to the stomach; hence its discharge by distinct acts of full vomiting. The stomach contained after death about a pound of coagulated blood.

"It has been mentioned that the left lung was not dilated, or changed in colour, &c. The cause of this difference in the two lungs, was explained while removing the parts from the cavity of the chest. The left lung was found to adhere with great firmness throughout its whole anterior, lateral and posterior surface, to its own pleura, and by that to the serous membrane of the ribs. The lung was enlarged very much, firm and heavy, and in its whole substance hepatized to so great a degree, that every trace of bronchial tubes and cells was wholly obliterated up to the point where the left bronchus penetrates the lung by its primary branches. From this point there was no channel by which air could enter the lung, and for that cause, the extravasated blood was totally excluded."

This interesting case adds another to the many already upon record, that stamp the insidious character of aneurismal dilatations of the aorta. As Dr. Wright very properly observes, no dependence can be placed upon the statements of previous good health which patients very generally give, for it is obvious in the present instance that the hepatization of the whole of the left lung must have been an alteration of considerable date. It may be asked if the stethoscope would have pointed out the real nature of the disease. It would have shewn the hepatization of the lung beyond a doubt, and we think that in all probability it would have indicated something wrong about the aorta. In dilatations of the arch with any degree of hypertrophy of the left ventricle, we almost invariably have a louder sound, or even a decided bruit, above the right clavi-

cle, and in all the cases of aneurism of the aorta that we have examined there has been this indication in the situation of the tumour. On this point, however, we would be understood to speak with some diffidence as we have not examined a sufficient number of cases of aortic aneurism to justify us in forming a sweeping conclusion. With the succeeding case we must conclude.

CASE 3. Gangrene of the left upper extremity—peculiar affection of the arteries.—Margaret Cash, æt. 56, admitted Oct. 20th, 1827, with aggravated diarrhœa, but no symptoms betraying urgent danger. The left hand was more powerless than the right, and the pulse in the former was barely perceptible. The diarrhœa was much moderated by judicious remedies, but a new train of phenomena now presented themselves.

"Ever since the patient's admission into the infirmary, she had complained of pain in the inner side of the left arm, a little below the insertion of the tendon of the teres major. Nothing appeared at the place indicated, to explain the cause of pain there; the part was sore to the touch, but neither swelled nor inflamed; the soreness extended an inch or two up and down the arm, in the track of the brachial artery. At the end of a week from her entering the ward, the pain of the arm, and soreness to handling, had almost entirely disappeared, but the patient was then sensible of total loss both of power of movement and sensation in the left hand. That hand was quite cold, and on the tenth day a faint bluish tinge was discovered over all the fingers, the colour permanent, and not varying by pressure. The discoloration of the fingers became deeper every day, spread slowly, first up the back of the hand, then through the palm, and by the sixth day from its appearance, had reached the carpal articulation all round. The fingers, up to the metacarpal junction, were now evidently lifeless; they were cold, black, and unpliant, yet not at all sphacelated, nor showing any vesiculation, or other marks of putrescent decay; nothing like separation of parts was manifested; the

blackness was lost indefinitely, by a fainter shade in the adjacent skin. The forearm next showed the same character of lividness, first occurring to the fingers; but on the arm the expression was different; here it appeared in the form of purpura, in blotches at distinct points on the arm, chiefly on the back of the arm, from the wrist to the small head of the radius. The blotches were large, irregular in form, and in a few hours after their appearance some of them became slightly vesicular or bullous, the cuticle being somewhat raised by sero-sanious extravasation. During this change in the condition of the arm, there were no marks of that low, topical, inflammatory action, which accompanies gangrenæ sphacelus; the arm neither swelled nor became hot. The death of the limb seemed to be taking place in a manner purely passive.

"As soon as the livid tinge was perceived on the fingers of the left hand, the patient, notwithstanding the continuance of general febrile irritation, was put on a decidedly sustaining course; the quinine was exhibited freely, with the cordial mixture, (sub. carb. ammoniacæ, aq. menth. et tinct. cardamom. so much commended by Mr. Cooper,) opium and camphor were given at night, the first liberally; the hand and arm were kept enveloped in fomentations of bark and chamomile, charged with spirit of camphor and tincture of myrrh. The supporting plan, prosecuted regularly for many days, and varied according to circumstances, made no satisfactory impression. The powers of life gradually declined, stupor supervened, and the patient expired on the twenty-first day after entering the hospital. The discolouration of the left arm never spread above the elbow-joint, and nothing of gangrene, nor any petechial or purpurous spots appeared on any other part of the body; there was no gangrenous fetor about the arm. For more than a week before the death of the patient, the diarrhœa was inconsiderable."

"*Examination.*—For the purpose of tracing better the state of the arteries in the left arm, a pipe was introduced into the left

subclavian, and the fine injection thrown in as fully as possible, the arm was then removed at the shoulder-joint. The artery and vein, (cephalica magna,) had a very unusual relation to each other. The former was filled with the injection as far as the bend of the arm; its course was very serpentine, and two inches below the root of the superior profunda, made a sudden curve, so as to describe a semicircle an inch in diameter. This bend was apparently referrible to the state of the vein at that point. From the axilla downwards, the great vein was enlarged, and filled with semi-solid black blood; in two or three places above the doubling in the artery, the vein was dilated into distinct circumscribed tumours of moderate size, while at the place of sudden curvature in the artery, there was one of those tumours the size of a musket ball, and solid as if the contained blood was firmly coagulated. Round this great varix the artery turned close, to take afterwards its ordinary course to the bend of the arm. It was to this spot the patient pointed as the seat of pain in the arm. The external cellular coat of the artery exhibited a high red colour throughout its whole course, from the axilla to the bend of the arm; just above the turn of the artery round the great varix, its thickness was increased for the space of an inch, to more than three times its circumference in any other part. This enlarged portion of the artery was firm, and consisted not in aneurismal dilatation, but in general thickening of its coats all round, to one-third of an inch, by which its channel was very much diminished. The profunda superior was very much enlarged in its trunk, and involved at its branching in a plexus of veins, showing a number of varicose pouches filled with black blood.

"The roots of the radial, ulnar, and interosseal arteries, were full, round, and hard, apparently distended by injection; but it was found that the injection had not penetrated below the bend of the arm, and was stopped there abruptly by a plug of solid coagulum, which extended continuously through every trunk and considerable

branch of the forearm.* There was no earthy deposit in the coats of the humeral or proper brachial arteries.

"The right arm was dissected without previous injection; the veins were large, but natural in appearance; no varices or other irregularity. The humeral artery, with an exception to be noticed directly, was of ordinary appearance, and regular in its course. At two fingers breadth below the root of the profunda, the artery was suddenly enlarged into a bulbous body, somewhat oval in shape, and about the size of a large almond; its walls very thick and spongy, with portions of loose flaky matter in their substance; the center of the tumour contained a little pus, and immediately around the pus was a substance resembling the matter of crude tubercles. The enlargement of the artery then was the effect of steatomatous degeneration in its coats, and the tumour which had been found in the left humeral artery was the same morbid conversion, less advanced. The canal of the right artery was not quite obliterated at the point of disease; it was pervious there, but the passage very contracted, and not through the centre of the tumour, but on the side next the bone, and very near the surface. Although the continuity of the tube was preserved, it is probable that little if any blood passed through the diseased part of the artery; the passage through the tumour was very confined, and the trunk of the artery, directly above and below the enlargement, had a shrunk and wasted appearance. The profunda was very full in its trunk, and divided near its root into five principal branches, three of the largest taking a course down the arm. It is proba-

ble that the forearm depended mainly, if not altogether, on the supply by the branches of the profunda, through the anastomoses; the state of the latter branches could not be satisfactorily ascertained, as the arm had not been injected. The cellular coat of the right humeral artery had nothing of that strong red tinge, which was very obvious over the whole trunk of the artery in the left arm.

"The heart was much enlarged and flaccid; the right auricle uncommonly capacious; the descending and ascending cavas dilated in a very remarkable degree, before entering the auricle. The right ventricle was dilated, and its wall thin; the root of the pulmonic artery expanded in a pouch-like form, its coats attenuated, and the central points of its semilunar valves chalky. The left auricle as usual. The left ventricle large, flaccid, and thin. The coronary arteries hard and friable. The root of the aorta much dilated; at the arch swelled into a bag-like expansion, twice as capacious as the healthy form of the vessel at that point; its semilunar valves full of concretions. The enlargement of the aorta, more regular in figure, continued down the trunk through the chest and abdomen, and the whole track of the vessel, from the ventricle to the bifurcation, was studded with calcareous formations in large patches, smooth and firm, and as usual, lying between the coats. At the arch, the patches of calcareous matter were particularly large, two or three of the plates equal in surface to a twenty-five cent piece, and exceeding an inch in length. The carotids and subclavians did not show any degeneration of their coats; the veins of the neck were uncommonly large and distended with black blood. The lungs were sound, but unusually dark and heavy, from engorgement of the pulmonary veins. In the abdominal cavity there was no manifest lesion of any of the structures; the mucous coat of the small intestines showed some patches of slight phlogosis. The encephalon was not examined.

"The appearance of the inferior extremities was natural."

We think with Dr. Wright, that the

* "The humeral artery was dissected out of the arm, and with it an inch or two of the branches in the forearm containing the coagula described; the concentered blood could not be pressed out, and now after twelve months maceration in dilute alcohol, the coagulum is perfect as ever, showing a deep purple hue of the branches as far as it extends."

gangrene of the left upper extremity depended on constantly failing energy in the whole limb rather than on any particular obstruction. A woman of fifty-six, with a flaccid heart, extremely morbid arterial system, and worn down by diarrhoea, is no unlikely subject for gangrene of an extremity, especially if any local peculiarities of the blood-vessels should concur in diminishing the vital energy of the part. The mortification in the present instance had much of the character of that "dry gangrene" which occurs after sudden obstructions of the circulation in a limb, or in very enfeebled constitutions. The case is interesting in a physiological point of view, and also in reference to what we may term the morbid anatomy of advanced age, that period so exposed to danger from the wear and tear that the passions and the turmoil of life have inflicted on the heart and arteries.

XIV.

ST. GEORGE'S HOSPITAL.

ON PERICARDITIS.

THE frequency of rheumatic pericarditis, its dangerous character, and the insidious manner in which it occasionally steals upon the patient, render an accurate knowledge of the disease an object of importance to the practical physician. Many excellent papers have been written on this subject, and yet it too frequently happens that the symptoms are not recognized by the practitioner, to the detriment of the patient and mortification or even disgrace of himself. We lately saw an instance in which two medical men, one in considerable practice, after carefully investigating the circumstances of the case, pronounced that the pericardium was not inflamed. On applying the cylinder, it was evident, and without auscultation it was more than probable, that the heart had been very severely inflamed, and enlargement of the organ with all the sequelæ of rheumatic pericarditis were fully established.

In the present report we propose to adopt the following arrangement. First we will give some fatal cases of rheumatic pericarditis; then some instances of pericarditis arising from the propagation of inflammation from the pleuræ, or from other causes; thirdly, cases of rheumatic pericarditis relieved by remedial treatment; fourthly, we will give the notes of two dissections, appearing to shew the perfect cure of the disease; and lastly, we will venture on a few remarks deduced from the facts we shall have laid before our readers, and from others which want of space may compel us to omit. We believe that by this method we shall exhibit in miniature a tolerable portrait of pericarditis.

I. FATAL RHEUMATIC PERICARDITIS.

CASE. 1.* Henry Hall, ætat. 33, a brush-maker, admitted July 15th, 1829, under Dr. Chambers.

Edema of legs—dyspnœa—orthopnœa—much wheezing after exertion—startings from sleep—turbulent action of heart, which beats over a larger space than natural, with very distinct *bruit de soufflet*. Pulse 125, small, soft—skin cool—tongue slightly furred, moist—bowels open from medicine—urine free, natural.

Nearly two years ago had rheumatism for several months—has had palpitations and dyspnœa since last Christmas. In January last became affected with dropsy, for which he was in this hospital, and was benefited by the usual means. Has been getting worse for the last five weeks.

Blisters, blue pill with squill, diuretics, and one bleeding were the means employed, but the symptoms proceeded from bad to worse, and he died exhausted in the evening of the 27th.

Sectio Cadaveris. Body much emaciated—lower extremities rather œdematous.

* This case has been already detailed in a former number of the Journal; we shall therefore be very brief with it here.

Thorax. Pleuræ on left side universally united by old, elongated cellular adhesions—pleuræ on right side universally and almost inseparably adherent. Left lung crepitous, but not perfectly so, throughout, gorged with blood in its inferior parts, with serum in its superior—right lung more filled with blood and less crepitous than the left, and sufficiently dense in parts to sink in water. No tubercles in either lung.

Two layers of pericardium closely and completely bound together by old adhesions—no thickening of the membrane.

Heart very large, chiefly from hypertrophy and dilatation of left ventricle—cavities of other chambers dilated, but their parietes little altered in density. Valves and aorta sound.

Abdomen. Liver rather large, and of nutmeg colour in its interior—kidneys healthy.

Cranium. Not examined.

CASE 2. John Copas, æt. 24, a gardener, admitted Oct. 14th, 1829, under the care of Dr. Chambers.

Diffuse rheumatism, worse when warm and aggravated by sweating—slight œdema of legs—dyspnœa—orthopnœa—most extensive and strong action of heart, *agitating* nearly the whole chest—bruit de soufflet. Pulse 120, strong—skin cool, pallid—tongue clean—bowels open twice daily—urine free.

Had acute rheumatism eight years ago, and again four years ago, and heart has been affected since the first attack; has been able to work except at intervals, when he has suffered from attacks of dyspnœa with hæmoptysis—has generally lain on the left side in consequence of feeling uneasy on the right.

Blue pill with squil and digitalis, senna with supertartrate of potass, and a diuretic draught of nitric æther and juniper, &c. were prescribed, but the patient died suddenly on the morning after his admission.

Sectio Cadaveris. Surface generally leucoplegmatic and puffy—lower extremities œdematous.

Thorax. Pleuræ on both sides closely and

universally united by old cellular adhesions. Lungs gorged with blood and serum in dependent parts, with air elsewhere, but not hepatized.

Layers of pericardium generally adherent, in some parts closely, in others more loosely—no fluid.

Heart of enormous size from hypertrophy and dilatation, nearly in equal proportions; hypertrophy of left ventricle very remarkable. Mitral valves slightly thickened and roughened but without bone: aperture not at all narrowed. Semilunar valves of aorta thickened; one of them shrivelled, and another so loosely connected at either end that it nearly hung back into the ventricle, and was incapable of presenting any barrier to the reflux of blood from the aorta.

Arch of aorta dilated without deposits—a few atheromatous patches in the descending thoracic at its commencement.

Abdomen. Liver rather large—kidneys natural.

Cranium. Clear serous effusion between arachnoid and pia mater—none in ventricles. Arteries of brain pretty healthy, carotids only being slightly opaque.

CASE 3. Mary Wood, æt. 18, unmarried, admitted Oct. 28th, 1829, under the care of Dr. Seymour.

Severe pain in chest, referred to lower part of left side, aggravated by deep inspiration, and preventing her from taking a full inspiration—cough without expectoration—dyspnœa—playing of *alæ nasi*—countenance pallid and rather anxious. Pulse 120—tongue white—bowels open.

Present symptoms commenced about a fortnight ago with severe pain below the left nipple; has been twice bled, blistered, and leeches, with some but not permanent relief. Two years ago had acute rheumatism for great part of Winter, and was leeches about the wrist, &c. Since that time she has suffered from shortness of breath on exertion, and been subject to palpitation, flatulence, and pain in the præcordia.

V. S. ad 3xvj. Hirud. xx. pect. vesp. Postea fotus.

Hyd. sub. gr. iij. Op. gr. ʒ. Conserv. cynosb. q. s. ut ft. pil. ter die sum.

29th. P. 100, not strong—pain in left side of chest and hypochondrium—blood not buffed or cupped; (it was not got very freely.)

H. Senn. stat. H. cetac. c. Tl. op. ʒ. ʒ. xxv. h. s. Intern. alia.

31st. Complaints of very severe pain in the side—tongue loaded—bowels not open.

H. Senn. stat. Op. gr. j. Ext. hyos. gr. ij. ft. pil. h. s. s.

On Nov. 1st, she referred her pain to the left false ribs and sternum, which parts were tender to the touch. Was ordered senna draught, warm bath in the evening, soap and opium pill with ext. col. c. every night, and a draught of ammoniated tincture of valerian in camphor mixture thrice daily.

On the 3d, when we examined her, she had dyspnoea—pain in left side of chest on inspiration—decubitus on that side—pulse quick and rather sharp—action of heart stronger than natural to the touch—arteries of neck beating strongly. By percussion, the dull sound in the region of the heart was extensive; by auscultation, the heart's action was heard more extensively than usual, especially on the left side—the sound of the ventricle was prolonged, dull, and closely approaching to the bruit-de-soufflet—the impulsion was increased.

Dilatation and hypertrophy of the heart, after pericarditis—probably adhesions of the pericardium.

On the 5th a belladonna plaster was applied to the region of the heart, a draught of tinct. castor. with subcarbonate of ammonia ordered twice daily and an anodyne pill prescribed at night. On the seventh these medicines were omitted and the patient was put upon calomel and opium, with occasional morning doses of senna. On the 10th the pulse was 120, sometimes intermitting, the cough troublesome, but unaccompanied with puriform expectoration. A blister was applied and ordered to be kept open, and on the 13th she felt relieved. On the 15th she complained of pain in the region of the heart increased by coughing—pulse sharp but not strong.—

Blister repeated—beef-tea and arrow-root. On the 17th she had no pain whatever, and the calomel was only exhibited at night; on the 19th the mouth was rather sore and the mineral was omitted altogether.

22d. Very ill—great anguish in countenance and urgency of respiration—action of heart tumultuous, heard over great space, and attended with decided *bruit de soufflet*. Opium at night and another blister. On the 23d the pain was relieved, but the aspect presented an extraordinary pallor; she lay on the right side on account of the blister, but otherwise preferred the left.

Infus. digital ʒij. Sp. ath. nit. ʒss. Aq. pur. ʒx. Syrup. zing. ʒj. bis die. Rep. opium.

A partial relief followed this alteration of treatment, but a sudden change for the worse took place in the night of the 26th, and on the next day she appeared to be sinking, and had all the symptoms of a person under the deleterious influence of digitalis. Æther mixture and brandy were employed, with the effect of arousing her from the state of collapse into which she had fallen, but the gleam was a brief one, the improvement fleeting, and on the 30th this unfortunate young woman expired. For a day or two before her death the left lower extremity was observed to be swollen and oedematous, but not painful, or at least not severely so.

Sectio Cadaveris. Body much emaciated—left lower extremity pitting on pressure.

Thorax. Pleura on both sides adherent anteriorly and laterally; posteriorly containing about a pint or rather less of serum. Bosom of either lung united to pericardium, and the latter attached by recent bands of lymph to the anterior wall of left side of chest. Right lung gorged with air above, with serum below, its lower lobe condensed and hepatized—left lung also filled with air and serum, and rather condensed inferiorly. No tubercles in either lung.

Two surfaces of pericardium inseparably and closely united; in some places a distinct layer of lymph interposed, in others the adhesions intimate, cellular, and organized.

Heart very large—cavities all dilated—parietes thickened, particularly those of the left ventricle. Lining membrane of the left auricle remarkably opaque, and mitral valve so diminutive and shrunk that it *could not* have performed its office efficiently. Aorta and branches healthy. The heart generally from within presented a peculiarly mottled appearance, not dependent on any morbid condition of its lining membrane.

Abdomen. Liver, kidneys, &c. healthy. Left common and external iliac, and femoral veins obstructed by a coagulum. This must have existed for some days, as it adhered very closely in parts to the internal tunic of the vein, and presented the appearance of softening or *pus* in its centre, occasionally observed in polypi of the heart. Coats of the vein not perceptibly thickened or inflamed—no mechanical or other apparent cause for the obstruction in its cavity.

Cranium. Not examined.

CASE 4.* John Green, æt. 43, admitted Jan. 6, 1830, under the care of Dr. Chambers.

"Weight in the chest" with dyspnœa and hoarseness—cough—thick and black sputa—emaciation—some palpitation. Pulse 120, sharp—skin cool, moist—tongue furred, yellowish white—thirst—bowels costive—urine scanty, and offensive.

Ailing three months. Was first attacked suddenly with dyspnœa; has been occasionally better, but is now worse than ever.

V. S. ad 3xij.

H. Sal. c. Oxytel Scill. 3ss. 6tis hor.

Cal. gr. v. h. n. Haust. Senn. cràs mane.
Diætâ parcissima.

* The history of this case was imperfectly obtained, and consequently the presence or previous existence of rheumatism was not ascertained. From the extreme rarity, however, of idiopathic pericarditis, we have thought it safer to introduce it in its present place, than to offer it, without better proof, as an instance of so unfrequent a form of the disease.

Vesp. Empl. Canth. sterno.

Sth. Blood much buffed, highly inflamed—pulse 84, sharp—skin cool, moist—tongue furred—bowels costive—urine very free—expectoration of clear mucus tinged with blood.

V. S. ad 3xij.

Hyd. Sub. gr. ij. Op. gr. ½, 6tis hor. Haust. Senn. cràs. Omr. H. Sal.

On the 9th he was seen by Mr. Hutchins, the house apothecary, and ordered leeches to the sternum, effervescing draughts, and a cathartic enema. In the evening a mustard poultice was put on the right side, and next day digitalis in infusion of roses.

11th. Vomited three pints of green bilious matter since yesterday evening—tenderness of right hypochondrium. Pulse 72, slightly hard—skin clammy—hiccup.

Cal. gr. ij.—Op. gr. ½, 3tis hor.

Cuc. Cr. ad 3x. *reg. hepatis. Postèd fotus.*

Next day he died. We examined this patient for a few moments with the stethoscope on the 8th. Arterial pulsation was visible at the root of the neck on either side, and above the sternum. The *bruit de scie* with some impulsion was distinct in the cardiac region. *These signs seemed to indicate active enlargement of the heart, and probably pericarditis.*

Section Cadaveris.—Thorax. Right side apparently more prominent than the left; old adhesions of pleuræ in the latter, and about three ounces of serum—about eight ounces in the former. Lungs œdematous and emphysematous—lower parts of both carnified.

Pericardium containing organized lymph, partly disposed in the form of bands, partly as a flocculent deposit.

Cavities of heart, more particularly of right ventricle considerably dilated; no hypertrophy of latter. Much hypertrophy of left ventricle, its parietes being three-fourths of an inch in thickness at base, half an inch at apex. Valves natural—slight atheromatous deposits round the coronary arteries.

Abdomen. No marks of hepatic inflammation—kidneys, &c. natural.

Cranium. Not examined.

II. PERICARDITIS SUCCEEDING DISEASE OR INFLAMMATION IN CONTIGUOUS PARTS.

CASE 5. *Pericarditis—aneurismal pouch at the origin of the aorta.*

Henry Cook, æt. 29, a stone-sawyer, admitted Dec. 9, 1829, under the care of Dr. Chambers.

Pain across chest, especially in left side, increased by full inspiration which excites cough—dyspnoea on the least exertion—palpitation—throbbing of the head—decubitus on left side difficult. Pulse 120, full and sharp—skin cool—tongue white—some thirst—anorexia bowels costive—urine high-coloured.

Has been disabled by illness from working for the last six weeks—was at first seized with pain in the epigastrium, which extended to the left side. Says he has not been feverish.

V. S. ad. deliq. et rep. post hor. 8 nisi prius cessarit dolor.

H. Salin. c. Liq. Ant. T. 3j. 6tis. hor.

H. Senna cras—D. Parcissima.

10th. Has been bled to 3xxx with some relief at the time but more this morning—still some pain in left side. Pulse 110, softer—tongue furred—blood buffed.

C. C. lat. Sinist. ad. 3xij.

Hyd. Sub. gr. v. o. n. P. c. H. Salin.

11th. Relieved by cupping—deep inspiration still excites pain and slight cough—heart tranquil—pulse 96, soft—bowels open—urine scanty and high-coloured. Occasional chills succeeded by heat.

Empl. Canth. amplum lat. dol.

Adde Haust. Tr. Op. 1℥vi. H. Senn. cras.

14th. More tightness across left side and dyspnoea—inspiration causes dry cough—starts at night—pulse 120, sharp—slight thrill in action of heart.

V. S. ad 3xiv. et peract. V. S. capt. Op. gr. ii.

Rep. H. Senn. cras mane et H. Sal. &c.

15th. Sinking. Stimuli were given but with no avail, for he rallied not and died in the course of the morning.*

Sectio Cadaveris. Body not much emaciated.

Thorax. Pleuræ on right side extensively united by old cellular adhesions; a little fluid in the posterior part of the cavity—pleuræ on left side not so extensively adherent; slight flakes of recent lymph on pleura pulmonalis, and more fluid than on opposite side. Lungs gorged with serum in upper lobes, carnified in lower.

Pericardium containing about 4ozs. of straw-coloured clear fluid, with some bands of recent lymph extending across its cavity, particularly at the root of the aorta, where the two surfaces of the membrane adhered pretty firmly.

Some dilatation and more hypertrophy of the left ventricle of the heart—right ventricle rather thicker than natural. Valves sound.

Immediately above the semilunar valves the aorta presenting an aneurismal sac about the size of a duck's egg, covered in great measure by the united layers of the pericardium, but projecting in part within that cavity. The communication between the sac and the aorta was about an inch in diameter, and the margins of the aperture so abrupt and defined that the sac was evidently that of a false aneurism. The wall of the sac on one side was formed by the right side of the pulmonary artery, and this was so thin that it had either given way spontaneously or been accidentally injured in the examination, for a small rent was found in it by which a communication was established between the sac and the pulmonary artery. The semilunar valve of the pulmonary artery below the fissure was firmly united to the side of the vessel.

Dilatation of ascending arch of aorta—some atheromatous deposits in the coats.

Abdomen. Nothing particular.

Cranium. Not examined.

CASE 6. *Pericarditis—Aneurism of the Aorta at its Origin.* Thomas Hill, æt. 42, a paper-hanger, admitted last Autumn, under the care of Dr. Wilson.

nor, as far as we know, was the stethoscope applied.

* We did not see this patient during life,

On right side of inferior half of sternum a globular-shaped tumour, slightly prominent, not distinctly circumscribed, pulsating synchronously with the arterial pulse. Pulsation stronger and more superficial at two particular spots—tenderness of the integuments on pressure—tenderness over sternum and contiguous ribs. Pain shooting down right arm—occasional swelling of the same—puffiness of face—disposition to œdema of legs. Dyspnœa—some orthopnœa—not much cough—palpitations—flatulence. Pulse sharp, vibratory—face rather florid and injected—urine scanty.

Attributes his complaint to over-exertion at his business a twelvemonth ago, shortly after which he became affected with constant darting pains in right side of thorax, increased upon exertion and attended with dyspnœa. About nine months ago first noticed the tumour, and about that time the swelling of the legs and palpitations first made their appearance.

Auscultation. Strong bruit de soufflet with much impulsion in tumour; former heard over a large space—stroke above right clavicle clearer than in tumour. Heart's action powerful, and accompanied with bruit de soufflet, not so whizzing as in tumour—auricular sound rough as well as ventricular.

Active enlargement of heart, especially ventricles. *Aneurism of aorta very near its rise from the left ventricle, part of sac probably receiving a covering from the pericardium—depositions in coats of aorta—some dilatation of aorta beyond aneurismal sac.*

The patient went on tolerably well from the time of his admission till about the middle of November. He was then attacked with cynanche tonsillaris, the right knee-joint swelled, erysipelas of the face, with much prostration, supervened, and on the 21st the patient died.

Secutio Cadaveris. Face puffy—lower extremities slightly œdematous.

Thorax. Pleuræ on right side united by old adhesions—pleuræ in upper two thirds of left side united in the same manner, but containing below a few ounces of dark, turbid, sero-purulent fluid. Bosom of right

lung attached to the side of the aneurismal tumour, which projected into the right side of the chest; lung in this situation carnified. Lower lobe of left lung carnified also.

Surfaces of pericardium united closely and universally by old cellular adhesions. Heart actively enlarged, especially the left ventricle, but not to an extreme degree.

Whole arch of aorta much dilated—coats puckered and uneven from atheromatous deposits, without any bone—internal coat generally sound. From the right side of the aorta, at its root, arose a pouch sufficiently large to contain a russet apple. It passed under the right border of the sternum, encroached on the right pleural cavity, and its superficial paries was in intimate connexion with the cartilages of the 2d, 3d, and 4th ribs. None of the cartilages destroyed. Sac nearly filled with a polypoid concretion, not laminated and only partially adhering to its sides. Inner surface, both of the sac and dilated aorta, fissured and abraded in several places.

Cranium and Abdomen. Nothing particular.

Right Knee-joint. An ounce or more of pus in the cavity of this joint, without abrasion or ulceration of the cartilages.

CASE 7. *Pericarditis—Fungus Hematodes of the left Lung, and Pleurisy.**

Benjamin Long, æt. 27, admitted, Dec. 16, 1830, under the care of Dr. Hewett.

Cough—cutting pain in left side—decubitus on that side—inspiration imperfect and wheezing—expectoration of glairy, scanty mucus—emaciation—disposition to hectic.

First attacked, 6 weeks ago, with cough, dyspnœa and pain, frequent chills, succeeded by fever and thirst. For first fortnight spat some scarlet blood. After three

* We shall notice this and the two succeeding cases very briefly, as they will, with one exception, form the subject of a future report for a different purpose.

week's illness convalesced, but a fortnight ago had a relapse, and has since suffered from present symptoms. Was previously a healthy man.

On a subsequent and more careful examination of the chest, the left side was found to be contracted, universally dull on percussion, and devoid of respiratory murmur. The heart, too, was heard and seen acting more extensively than natural, but without increased impulsion or bruit de soufflet. On the 13th of March, examination of the heart by the stethoscope discovered more impulsion and slight bruit de soufflet. On the 24th, the left side of the chest, which had previously measured an inch less than the right, was found to have regained its natural dimensions. On the 30th, the patient was seized with a rigor and vomiting of glairy mucus, pain in the stomach and wildness of manner. Next day he was attacked with severe pain in the left side of the chest, the intercostal spaces were raised to the level of the ribs, ægophony was established, and this side now measured three quarters of an inch *more* than the right. On the 3d the patient died.

Sectio Cadaveris. Body emaciated.

Thorax. Some old cellular adhesions between pleuræ on right side—no fluid. Some crude tubercles and one very small vonica in right lung. Partial adhesions of Pleuræ on left side, with a pint or more bloody serum and a few flakes of lymph. This effusion, from its comparative clearness, was evidently of recent date. Left lung almost universally infiltrated with deposits of fungus hæmatodes, not encysted. The great bronchus on this side was pressed on by the malignant growth, its channel nearly obstructed, and its parietes assimilated to the disease. No part of the lung respirable in the least degree. One of the malignant deposits had pressed on the pericardium opposite the left auricle, and although the membrane was not ulcerated or destroyed, the morbid growth encroached on the cavity.

Considerable quantity of serum, with flakes of lymph, in the cavity of the pericardium, the opposite surfaces of which were

more opaque than natural. The membrane was corrugated, and in some places slightly reticulated.

Heart itself not enlarged or otherwise diseased—great vessels healthy.

CASE 8. Slight Pericarditis — Pneumo-thorax on right Side.

James Smith, æt. 21, a footman, admitted March 8th, 1830, under the care of Dr. Hewett.

Pain under lower half of sternum, which is not raised by inspiration—dyspnœa—some cough—no expectoration. Decubitus on left side, but is obliged to change his position frequently in consequence of cough. Pulse 140, very small—aspect pallid and strumous.

Ill six days, but had a bad cold previously. Was first seized suddenly with severe pain in the lower part of right side of chest, for which he has been actively treated. Has been subject to winter cough.

On the 10th he was examined by the stethoscope, and the presence of pneumo-thorax with bronchial communication discovered without difficulty. The dyspnœa, &c. increased, the right side became larger than the left, the hectic was severe, and to render the case even more hopeless than before, the absorbents in the left arm became inflamed in consequence of the puncture made in bleeding before his admission into the hospital. The contractions of the heart were extremely rapid, but no bruit de soufflet existed, or at least we discovered none. On the 4th of April the patient died.

Sectio Cadaveris. Pneumo-thorax with about a quart of green sero-purulent fluid in the right side of the chest. Pleuræ coated with "concrete pus," and presenting in one or two parts some long bands of adhesion between them. At the inferior part of the middle lobe of the lung, very near the spine, a fistulous opening leading into a vonica about the size of a horse-bean, and communicating through it with a large bronchial tube. Lung itself generally carnified. Pleuræ on left side from inflammation, but united by some old adhesions. Lung containing some tubercles, and one or two very small vomica.

Heart pushed over towards the left side. About an ounce and half of greenish serum in the pericardium, with some flocculi of loose recent lymph. Heart not at all enlarged, or altered in structure.

Abdomen. Some inflammation of the peritoneum covering the diaphragm and liver.

Cranium. Not examined.

CASE 9. *Chronic Pericarditis—Pneumo-thorax on Right Side.** George Canning, æt. 23, a gardener, admitted Nov. 11th, 1829, under the care of Dr. Chambers.

This patient had pain in the right side of the chest, dyspnoea, cough, hectic. He had been subject to cough for some time, and had suffered from the more severe symptoms for eleven days. They had been combatted by active depletory measures. On applying the stethoscope the signs of pneumo-thorax in the right side were apparent. He remained in the house till the 19th of January when he died. During the interval between his admission and decease the cough and hectic had continued, the expectoration was never more than *suspicious* and always scanty, he was successively attacked with pain in both sides of the chest and in the præcordia, his dyspnoea was occasionally severe, and latterly he had some orthopnoea likewise. He never complained of palpitations, nor was the stethoscope applied after the day of his admission.

Sec tio Cadaveris. Pneumo-thorax, liquid effusion, and fistulous communication with bronchi in right side of chest. Thick layer of lymph and concrete pus on pleuræ. Lung compressed and carnified. Old adhesions of pleuræ on left side—several groups of miliary tubercles in left lung.

Heart pushed considerably to the left. A quantity of bloody serum in the pericardium, and reticulated lymph, not very recent, deposited on both its surfaces. Heart little, if at all enlarged, and rather flaccid. Valves and great vessels healthy.

* This case having already been detailed in a former number, we shall merely glance at it.

We had hoped and intended to have completed the article in this Fasciculus, but we find it is impossible. We shall therefore stop for the present, and commence the succeeding portion of the report, with cases of "rheumatic pericarditis successfully treated." It is not for deficiency of stores that we are now brought to anchor, but for want of sea-room. H. J.

XV.

HOTEL DIEU.

M. DUPUYTREN'S SENTIMENTS ON UNION
BY THE FIRST AND SECOND INTENTION.*

It may be interesting, perhaps instructive, to British surgeons to hear the opinions of so eminent a Frenchman as M. Dupuytren, on the subject of union by the first intention. We know there are some gentlemen in this country who conceive their practice to be as near as possible to perfection, and measure the errors of their neighbours by the scale of distance from their own standard. Truth, however, is not so exclusive as prejudice, error is first cousin to bigotry, and all candid men will consider what is said on both sides of a question, before they decide the issue. The following remarks are extracted from the clinical lectures of M. Dupuytren.

It would appear that several amputations of the upper or lower extremities were performed last Winter at the Hôtel Dieu, and afforded the surgeon of that establishment an opportunity of delivering his sentiments and detailing the results of his experience. The ancient surgeons did not argue the advantages, or otherwise of union by the first intention, because by their modes of operating and dressing they could not well obtain it. The mode of procuring that desirable event was discovered in England, adopted with ardour in Germany, and, although employed by Dessault, condemned in the

* Journ. Hebdomad. No. 75. Mars, 1830.

first instance, and even now but half understood and reluctantly practised in France. The military surgeons of that country, who be it remembered were most frequently in contact with the English, defended the new method by word and by deed, and the benefits it promised seduced very many of the French Savans. Isolated cases of success poured in, but as M. Dupuytren very justly remarks, stray facts are merely chaff and bran, matters of no weight and arguments of little value in determining a great question. It is only by cases en masse, by the collection and comparison of a number of facts, that we can arrive at general and sound conclusions. "Now such a method of examination is unfavourable to the triumph of union by the first, over union by the second intention."

M. Dupuytren is convinced that more amputation patients are lost by the new than by the ancient method, and on a careful consideration of a number of cases he finds that the results are in favour of the latter. Out of thirty amputations of limbs (large and small) in which union by the second intention was attempted, there were six fatal cases; whilst out of twenty-nine other amputations in which union by the first intention was essayed, there were nine fatal cases. M. Dupuytren has on several occasions made similar calculations. The cases are mostly those of patients suffering from suppurations of long standing, as from caries, white swellings, &c. and it is impossible to arrest such discharges with suddenness and violence, without producing great disturbance in the system. Bold or insidious inflammations of the viscera are too often the consequences, and M. Dupuytren believes that phlebitis is more common under the present method than it was under the old one.

Union by the first intention succeeds better in the hands of military surgeons than in civil hospitals, because the subjects are active and vigorous men, who have not laboured previously under local inflammations or suppurations. Such subjects bear the operation better, and the symptoms that succeed are of a less complex and questionable

nature, than those which occur in hospital patients. Persons in the latter who require amputation in consequence of accidental injuries, are cured as frequently as soldiers, and are as well adapted for union by the first intention. The advantages then of union by the first intention are far less brilliant, and its disadvantages more numerous than its partisans professed and believed. It is beginning to be abandoned, observes Mr. Dupuytren, in the country which gave it birth.

The able Baron himself appears to be decided on only attempting it in a few cases, and is resolved to adopt the old mode of dressing in the great majority. M. Dupuytren, however, has no intention of resuscitating the faults of the old system; of cramming the stump with lint and dressings, and tearing them away before they were properly detached by the suppurative process; a practice which did an infinity of mischief, and rendered the 'first dressing' more excruciating and dreadful than the operation itself. M. Dupuytren's intention is merely to interpose a certain quantity of fine lint between the sides of the stump, to approximate the latter gently by adhesive straps, and finally not to withdraw the dressings until they are loosened and cast off by the supuration. By these means a more or less copious secretion of pus is kept up on the face of the stump, and the patient is not subjected to the inconveniences and dangers arising from the sudden stoppage of an habitual drain.

Such are the sentiments of a distinguished surgeon, and very shrewd observer of the thousands of facts which his situation at the Hôtel Dieu may be said to lay at his feet. A hospital like that is a kind of *harem*, wherein are collected, not the dark-eyed maids of Macedon or the Morea, nor the lovely forms of the Circassian, Georgian, and tenant of the Caucasus, but choice specimens of pathology, the bean idéal of the subjects of surgery. The most stupid man must reap *something* from such a crop of opportunities, an able one would lay up a store like Joseph's in Egypt. On these accounts the sentiments of M. Dupuytren deserve to

be treated with deference, although they may not square with the experience of this country.

But still it is singular that union by the first intention should fail so much oftener in France than it does in England, and so many patients die in the attempt to procure it. We lately conversed with a gentleman, on whose accuracy we can place the most entire confidence, and who passed fifteen months in the French metropolis for the purpose of attending at the Hôtel Dieu, and witnessing the practice of M. Dupuytren. He was present at the clinical lecture of which we have given an account, and saw the amputations on which that clinique was immediately founded. His sentiments are very unfavourable to the French mode of dressing the stumps; and lead us to believe that M. Dupuytren is deciding against a practice, the merits of which he never *properly* tested. The stumps, says our informant, are loaded with dressings, and on the slightest occasion they are all removed, and lint crammed into the wound to encourage suppuration. M. Dupuytren appears to have never been cordially attached to the English method, and we know that insincere attachment is apt to lapse into hostility on trifling grounds of offence, to magnify faults, and be blind to beauties. If the results of union by the first and by the second intention were examined in this country in the manner which M. Dupuytren recommends, namely, by numerical calculations, we more than suspect that the balance of success would be greatly in favour of modern surgery. We shall return to this subject on another opportunity.

XVI.

ANATOMICAL PREPARATIONS IN WAX.

We deem it a tribute to merit, and a duty to the medical public, to notice and recommend the anatomical wax preparations executed by an ingenious German, (A. SCHLOSS, 50, Fore-street, Cripplegate) in a manner far superior to any thing of the kind which

we have yet seen, and at a very moderate expense. We had lately opportunities of very minutely examining the wax-works in the museums of Bologna and of Florence, and we have no hesitation in giving the decided preference to the German manufacture. The Italians tell us, indeed, that their delightful climate conduces so much to the ductility of their *pure* wax, that the English need never hope to imitate, much less excel them. Be this as it may, GERMAN INDUSTRY and PATIENCE have, in this instance, as much overcome Italian genius, in the art of modelling, as the sturdy warriors from the banks of the Rhine formerly surpassed the effeminate Romans in the art of war. In a late meeting of the College of Physicians, several specimens of M. Schloss's works were there exhibited, and we may fearlessly appeal to the numerous judges there assembled, for the truth of this assertion. We, therefore, invite attention to, as the best recommendation of, Mr. Schloss's collection.

XVII.

GENERAL PRACTITIONERS.

The public dinner for promoting a measure or mode of practice which we have long recommended, is at length fixed; and, although we are convinced that the said measure *must* ultimately come into full operation, we are not without fears that the poisonous leaven of furious party-spirit, which has for some time been boiling in the cauldron of professional agitation and degradation, will diffuse, or, at all events, attempt to diffuse its baleful influence among an assemblage of practioners, the great majority of whom are meeting for good and legitimate purposes. The eyes of their brethren are on their proceedings. And if they suffer themselves to be led away from the path of sober sense by the apple of discord, which will be artfully and furiously launched forth, after the Tuscan grape has excited the feelings at the expense of the judgment, the loss will be theirs, though the fate of this warning be that of Cassandra's prophecies.

XVIII.

ON STRICTURE OF THE RECTUM. By Mr. MACILWAIN. (2d Edition of his Work on Strictures.)

MR. M. considers a protracted residence of fecal matter in the rectum as always the result of disorder—and too frequently the precursor of disease. The muscular power of the gut is very considerable, and, in the ejection of its contents, receives the combined assistance of other muscles ordinarily engaged in respiration.

"The large calibre of this bowel, instead of being designed as some have imagined, to provide for a certain accumulation of feces, seems to me to have been given with a very opposite intention, viz. as affording a facility to their descent through a situation, where, from the probable previous absorption of any nutritive fluids, their sojourn could no longer be useful."

The rectum is further endowed with a peculiar sensibility which pretty constantly keeps up a *nismus* to evacuate its contents, when they have increased to any considerable amount. Still, however, this sensibility may be greatly impaired by long habits of resisting the impulses of Nature, and then the presence of even large quantities of feces in the rectum occasions little uneasiness. In this way the over-distended bowel loses more or less of its expulsive power, in the same way as the distended urinary bladder. Mr. M. is strongly impressed with the opinion that constipation, from negligence, is a common cause of stricture in the rectum.

"The causes of stricture in the rectum may be divided into those which result from disorder originating in the bowel, those which depend on its *juxta* position to other organs, and into those which are derived from more distant sources, by sympathy or otherwise. With regard to the causes which refer to the rectum individually, I believe the irregular performance of its functions to be the most frequent, whether this be induced by a torpid condition of the bowels generally, or by that gradual accumulation of fecal matter, which takes place in

the manner to which I have already adverted. Drastic purgatives frequently produce great irritation in the rectum, and they exert a still more noxious influence when that bowel is previously disordered by accumulated feces or otherwise. The causes which depend on its sympathy with, or *juxta* position to, surrounding parts, refer to disease or irritation existing in the urinary or genital organs. Affections of the urethra, prostate, and bladder of the male, or of the vagina, uterus, and bladder in the female, are capable of inducing diseases of the rectum. A retroverted or otherwise altered position of the uterus, and enlargement of the prostate gland, in consequence of their anatomical relation, sometimes give rise mechanically to obstruction in the rectum, without producing disease. As the different divisions of the alimentary canal sympathize with each other, so any disorder of the stomach or bowels may be productive of irritation in the rectum."

A loaded condition of the venous system generally, produces congestion of the hæmorrhoidal vessels particularly—thence arise piles, irritation, and disposition to stricture.

"Examination of strictured recta presents one or other of the following appearances: there is always more or less thickening and induration. Sometimes the thickening cannot properly be referred to any specific disease; frequently it is of a carcinomatous structure. It is either confined to a small space presenting an aperture, the edges of which are acute, which aperture may be of a rounded form or a mere slit, the bowel being free on either side of it, or the contraction occupies an inch or two, and there is a general thickening of the bowel apparently commencing in its muscular structure. To these appearances may be added ulceration of the stricture or bowel, or both. It is not uncommon to find the neighbouring surface of the bowel covered with firm flesh, like prominences such as might be supposed to result from hæmorrhoids, the blood of which had been absorbed. Piles and fistulae not unfrequently exist in connexion with these appearances, of which there is a very

fine specimen in the museum of the college. The situation of the contraction is generally within reach of a long finger, sometimes higher, even to the extent of several inches. Strictures have been found in the sigmoid flexure of the colon, but they are very rare, and, certainly, those who fancy that they have removed strictures in this part, must, I think, have deceived themselves. Stricture in the sigmoid flexure appears to me wholly out of the reach of surgery; but if the contraction be at the sigmoid flexure, that is, at the upper extremity of the rectum, it is certainly accessible by a bougie."

TREATMENT.

This is divided into general and local. The general treatment comprehends affections of various viscera complicated with or causing the disordered rectum.

"The local treatment, like that of stricture of any other mucous canal, consists of the periodical introduction of instruments, preceded and accompanied by the employment of measures calculated to allay irritation. The former have for their object either dilatation, division, or destruction of the stricture, by which last I mean the application of caustic. The cases which have fallen under my care have been one or other of the following varieties. The obstruction has either been the result of malignant disease, an intus-suscepted condition of the rectum, a stricture consequent on common thickening, relievable by the common bougie, or so near the orifice as to admit of safe division. I have, therefore, never had occasion to employ either metallic instruments or bougies armed with caustic. No doubt there may be cases in which the latter mode of treatment might be employed with advantage, but I can only speak of those with which I have been practically acquainted. I shall, therefore, at once describe the measures which are calculated to relieve irritation, and the circumstances to which it is necessary to attend connected with the introduction of a bougie. As the irritation is to be relieved precisely in the same manner

as when the stricture is in the urethra, it will be sufficient to enumerate the principal agents which in different cases we employ for this purpose. The catalogue consists of the local abstraction of blood by leeches at the verge of the anus, or cupping over the sacrum, blisters in the latter situation are sometimes of service; tepid emollient enmata, warm bathing, sitting over the steam of boiling water, occasionally a suppository, all likewise tend to diminish or relieve pain and irritation. It is desirable that the rectum should be kept as nearly as possible exempt from fecal accumulations, and where the bowels have been previously cleared by mild purgatives, in conjunction with enmata of warm water or mucilage, the injections alone will be frequently found sufficient."

Mr. M. thinks that, in almost every case, the practitioner will find it advantageous to preface the introduction of the bougie by a mild aperient, assisted at a proper time by injections of warm water. In using the bougie, the same gentleness is necessary as in strictures of the urethra. In the majority of cases the contraction can be felt by the finger—that is, it is within a few inches of the orifice, so that a straight bougie will answer the purpose. But as, in all cases, it is desirable to ascertain the state of the whole of the rectum, our author prefers a curved instrument.

"With regard to the time which the bougie should be allowed to remain, the best rule is, to regulate it by the feelings of the patient, since, if it excite much pain it will do harm, whilst in the absence of any suffering, the longer it be allowed to remain (in reason) the better. I have seldom allowed more than seven or eight minutes at first, but have usually increased the length of time to a full hour, after two or three introductions. We shall seldom find it practicable to increase the size of the instrument with the same rapidity here, as in affections of the urethra; on the contrary, it will be generally necessary, and almost always expedient, to introduce the same instrument twice or thrice before we employ one of a larger diameter, allowing an interval of two

or three days to intervene. Here, as in the corresponding affection of the œsophagus, the surgeon, must bear constantly in mind, notwithstanding the absence of those circumstances which I have spoken of as indicative of malignant disease, that the malady may be of a carcinomatous nature, and be especially careful that he do not rouse a comparatively dormant disease into a frightful activity. If the introduction of the bougie is to be successful, the patient will soon experience considerable alleviation of suffering."

If the bougie is to be successful, the patient will soon experience considerable alleviation of his sufferings. The evacuations will either take place by the natural efforts of the bowels, or the bowels will be more amenable to medicinal influence. Occasional recourso should be had to the instrument after the full-sized one has been passed.

"Sometimes the stricture may be felt by the finger, and if its whole length can be judged of, and the accompanying symptoms are fairly explained by the degree of obstruction which it offers, its division may be safely performed, and the patient happily relieved in a much shorter time than by any other method. The mode of accomplishing this is by the introduction of a common probe-pointed bistoury, or that recommended by Sir Astley Cooper for strangulated hernia. I have always employed the former. It should be introduced lying flat on the finger, against which it should be firmly pressed; this will avoid the risk of its injuring any parts inferior to the stricture. When the finger has reached the contraction, the edge of the bistoury should be turned towards the side on which we propose to divide, the instrument being kept steady by the finger on which it has been introduced. As the hæmorrhoidal vessels frequently become enlarged under circumstances of continued irritation, it is better to divide the stricture by two or three very small incisions in different directions, than to accomplish its division in one. If the latter mode were preferred, a sacro-lateral direction would probably be the most safe; but as the practice

above recommended will always effect the desired object, it should be preferred. As soon as the aperture be sufficiently enlarged to freely admit the finger, the case may then be treated by the bougie in the ordinary manner. I can confidently assert that this practice, adopted under favourable circumstances, has been productive of great and much accelerated relief, and that too in cases, in which, before the division of the stricture, bougies had made little or no impression. My friend, Mr. Kingdon, has also treated strictures of the rectum in this way with good success. Were it my object to speak of diseases of the rectum generally, I should have to shew, that as the irritation in the rectum which precedes stricture is attendant on piles, fistula, abscess, &c., so may these diseases be productive of symptoms simulative of those characterizing contraction of the bowel. This was not my intention. I cannot, however, quit the subject without mentioning the irritable sphincter, the symptoms of which so much resemble those of stricture. I believe it to depend on irritation in the bowel. The sphincter in this case resists the introduction of the finger with considerable power, and the irritation in the bowel frequently gives rise to painful efforts to eject the finger or bougie when brought in contact with it. The case may be known by the opposition afforded by the sphincter, and by the rectum being free from contraction. Attention to the general health, mild and spare diet, with regulation of the bowels, including the use of enemata, are in general successful."

We shall notice Mr. M's observations on stricture of the œsophagus in another article. We may here mention that the work from which we have analyzed the above, is a second edition of the author's former publication on urethral strictures, with the addition of a considerable portion of new matter.

XIX.

A PRACTICAL ESSAY ON DELIRIUM TREMENS, &c. By ANDREW BLAKE, M.D. &c. Octavo, pp. 68. 1830.

In the *Edinburgh Medical and Surgical Journal* for October, 1823, is a paper on the subject of this Essay by the same author. In the next year or two, Dr. Blake, while surgeon of the fifth regiment, saw many cases of the disease in the islands of St. Vincent and Dominica, all of which tended to confirm him in the opinions he had previously entertained as to its nature and treatment. The result of Dr. B.'s whole experience formed the subject of a thesis for graduation at Glasgow.

Our author is dissatisfied with the names which have hitherto been conferred on this peculiar malady—even with the one first used by himself—*delirium ebriositatis*. He now thinks the term *ERETHISMUS EBRIOSITATIS* the best designation, offering the following as the definition of the disease. “Indirect general debility, succeeded by a morbid increase of action in the brain and nervous system, which is attended with delirium, and terminates generally, either in sleep and subsequent health, or in death from collapse or effusion on the brain.

The complaint is very prevalent among British soldiers, as well as the lower of the white population between the tropics—no doubt on account of the facility of procuring ardent spirits there. The author, after some preliminary observations, proceeds to divide the disease into three distinct stages—succeeding each other as regularly as the stadia of an ague, “to which indeed it bears no small analogy, being to the brain and nerves what intermittent fever is to the arterial system.” In ten cases, to which he alludes in a table, the stage of nervous excitement came on at different periods, within five or six days from the date of admission for other complaints. It succeeded to trivial affections, of various sorts, and the period in hospital might be considered, in general, as the date at which the patient began to abstain from intemperate habits. Dr. B. has had

subsequent opportunities of seeing the disease come on during the prevalence of endemic remittent fever and ophthalmia, as well as different kinds of accidents. Patients taken into hospitals are, of course, deprived of spirituous potations, and the consequence is, that the nervous system of a person accustomed to such stimulation feels the loss of it, and gradually sinks into a state of extreme exhaustion, generally increased by the depletory measures employed for the other complaint. This state of exhaustion is the first stage of the malady, and is succeeded by a state of delirium too easily confounded with phrenitis, and too often fatal when so confounded.

The first distinct indications of this disease, according to our author, are, a peculiar slowness of the pulse, attended with coldness of the hands and feet, as also a cold moisture. These are preceded or accompanied by general debility, diminished temperature, and occasionally by cramp in the muscles of the lower extremities, giddiness, nausea, sometimes vomiting. The bowels are usually open, sometimes confined. There is nervous tremor of the hands and tongue, the latter being moist and but slightly furred. To these may be added dejection of spirits, frequent sighing, oppression of the præcordia, anxiety, short and interrupted slumbers.

As the second stage approaches, the countenance gradually assumes a wild aspect, the patient becomes restless, with an apparent anxiety to perform whatever you desire. The duration of the first stage will be in proportion to the nature and extent of the cause, and the state of the constitution and previous habits of the individual.

“When the second stage is established, a train of symptoms consonant with high nervous irritation gradually follows; mental alienation, in various degrees and forms, is developed, and with this an exertion of the nervous power to re-establish the state of energy, or rather excitement, to which the system had been habituated, and which existed previous to the cessation of the application of diffusible stimuli to the nervous system through the medium of the stomach.

The heart and arteries also at length sympathize; the pulse becomes quicker, though it continues small, and the heat of the surface increases. There is, however, throughout the disease, a marked difference between the temperature of the hands and feet and the rest of the body, the former retaining, in some degree, the icy and clammy feel already spoken of, while the rest of the surface may become even hot and dry. If this state continues long without amelioration, a clammy sweat pours from the skin, accompanied with excessive irritability, the disorder of the mind increases, and objects of the most frightful forms present themselves to the imagination of the patient, and in positions in which, as Dr. Pearson says, 'it is physically impossible they can be situated.' I recollect having witnessed a very distressing instance of this sort in the case of a man of the fifth regiment; the unfortunate sufferer, for a considerable time before his death, imagined he saw the devil at the ceiling above his head; and as the disease, which terminated rapidly, increased, he fancied the evil spirit approached him with a knife to cut his throat; and he actually expired making violent exertions to avoid the fatal instrument."

The mental bias is generally of the melancholic cast, usually concerning some misfortune to which the patient was previously liable. From the moment delirium is fairly established, the patient is deprived of the solace of sleep. *Pervigilium* may be looked upon as the pathognomonic symptom of the second stage of the disease. "When these symptoms have continued for one, two, or three days, and in a few instances even beyond that period, where a fatal termination is not about to take place, I have almost always observed their gradual mitigation, attended with a strong tendency to sleep, exhibited by yawning and drowsiness, which, as soon as it supervened, became profound, and lasted from six to eighteen hours, and occasionally longer, constituting the *third stage* of this nervous paroxysm, or general relaxation of the nervous energy,

similar to the capillary relaxation of the arterial system which takes place during the sweating stage of ague, and to which, in almost every instance that I have seen, convalescence has succeeded."

When the third, or sleeping stage, does not supervene in due course in this disease, and the general symptoms increase in violence, the mind appears to labour under excessive irritation, the patient makes many struggles, which are attended with copious perspirations. These last become cold as the disease advances, the pulse advances in rapidity and becomes thready—the tremor of the hands augments, and extends to the whole frame. *Subsultus tendinum*, contracted pupils, dry tongue, delirium, &c. usher in the fatal scene, as in typhus fever. Passing over our author's discussions on the proximate cause of delirium tremens, we give the following notes of a dissection, drawn up by Mr. Home, of the 85th regiment.

"On bringing the surface of the brain into view, it did not exhibit any marks of recent inflammatory action; and, with the exception of a small quantity of coagulable lymph, which, on removing the dura mater, was found thrown out between that coat and the tunica arachnoidea, appeared otherwise healthy.

"All the ventricles contained a considerable quantity of serous fluid, but more especially the two lateral, which were very much distended.

"The choroid plexus showed no marks of turgescence. The contents of the thorax and abdomen presented a natural appearance. The liver was small sized, but healthy in its parenchyma."

In respect to the *methodus medendi* Dr. B. recommends great attention to the stages of the disease, as exhibiting different symptoms, and requiring appropriate remedies. In the first stage, "if slight gastric derangement be present, attended with nausea and occasional vomiting, I have found effervescent draughts, in which there were ten drops of laudanum, administered every second hour, with emollient, and if neces-

sary* anodyne enemata, very efficacious. In the intermediate hour I have been in the habit of giving an oz. of rum with a little warm water and sugar; and of prescribing the warm bath, or tepid affusion, or even the cold affusion, according to the strength of the patient, and the probability of production of reaction; thus in a young and healthy subject I would have recourse to the cold affusion, and 'vice versa;' but if in this stage the warm bath should be preferred; it ought not to be of a temperature high enough to induce debilitating effects.

"I would recommend that anodyne frictions be at the same time made on the epigastrium, and that the head should be shaved and well rubbed with strong volatile liniment, so as gently to stimulate the surface of the scalp: a blister to the nape of the neck is also of advantage in assisting to excite action in the immediate vicinity of the brain."

When there is no nausea Dr. B. has given an ounce and a half of the camphor mixture, with some ether and ten drops of laudanum instead of the effervescent draught; and, when the appetite permitted it, he allowed soup, arrow-root, or other mild nourishment. The stimulating drink should be of the same kind as that to which the patient had been accustomed previously.

"Should, after all our efforts, the second stage, or that of nervous reaction supervene, we must not be discouraged; but then act on the principles generally recommended, namely, the administration of full doses of opium; taking care, at the same time, to support the efforts of the system by the assistance of diffusible stimuli and antispasmodics, such as brandy, rum, wine, porter, and

camphor or musk mixture, with ether, as directed in the first stage, varying, however, their administration according to circumstances. To these means I have been in the habit of adding calomel and Dover's powder, say two grains of the former, and six of the latter, every two hours, until the system became affected, or the disease yielded. Mercury may have been of service here indirectly, owing to its deobstruent and equalizing effects, as well on the circulation in general, as on the secretions.

"The warm bath should also be prescribed with the same views, but particularly to soothe nervous irritation, and favour an equal distribution of the circulating fluids, by exciting general perspiration, during the absence of which cold applications ought to be constantly kept to the head, in order to diminish sensorial action."

We shall terminate this article with an extract from a short essay on the disease under consideration, by Dr. Burton Pearson, of Lazonby, in Cumberland, published 30 years ago, and republished in our esteemed contemporary, the *London Medical and Surgical Journal*, for May, 1830.

"Observations on Brain Fever.

"Brain Fever. At the earnest solicitation of several people who have been afflicted with this grievous malady, I offer this small treatise to the public. Multifarious and repugnant theories on the science of life, still continue to agitate the medical world. Galen's writings, after the extinction of literature for several ages, were again revived, and produced innumerable controversies:—The acrimonious opposition of the Galenists and Arabians, and the complete overthrow of the latter, are well known to every reader. The chemists attacked the Galenists with fury, and they sustained a defeat. Different sects have originated from Stahl, Hoffman, Boerhaave, Cullen, and Brown. A medical review will convince any one how the faculty worry each other at the present day, about their different dogmas, with much injury to themselves and patients. For the above reasons I

* "Reference to my paper, published in the *Medical and Surgical Journal* for October 1823, will show that I have not copied this practice, I mean the administration of anodyne enemata, from Baron Dupuytren's publication, which appeared some years later than mine."

disavow all theory, and briefly state the circumstances as they occurred to me at the patient's bed-side. Out of 93 cases that have been treated by the principles here adopted, not one has fallen a victim to the disorder; but, when a contrary mode has been attempted, few have recovered, and those only whose constitutions were sufficiently vigorous to resist its ravages.

"I have called it Brain Fever, because it is universally known in Newcastle and its vicinity by that term. The same observation extends to putrid fever.

"*Cause.*—Frequent and excessive intoxication.

"*Description.*—It is preceded by tremors of the hands; restlessness; irregularity of thought; deficiency of memory; anxiety to be in company; dreadful nocturnal dreams, when the quantity of liquor through the day has been insufficient; much diminution of appetite, especially an aversion to animal food; violent vomiting in the morning; and excessive perspiration from trivial causes. The above symptoms increase; the pulse becomes small and rapid, the skin hot and dry; but soon a clammy sweat bedews the whole surface of the body; confusion of thought arises to such a height, that objects are seen of the most hideous forms, and in positions that it is physically impossible they can be situated; the patient generally sees flies or other insects, or pieces of money, which he anxiously desires to possess; and often occupies much time in conversations of negotiation, if he be a commercial man. Often, for many days and nights, he will continue without rest, notwithstanding every effort is made on the part of the physician to appease his mind, by variety of conversation, and variety of stimuli. He frequently jumps suddenly out of bed in pursuit of a phantom, and holds the most ineffable contempt for the practitioner, if he do not concur in his proceedings. He commonly retains the most pertinacious opinion that he is not in his own house, and that some of his dearest relations have sustained a serious injury. During the concurrence of these symptoms he often can answer medical questions properly

for a short space of time, and then relapses into the raving state.

"*Distinction.*—It is distinguished from putrid fever, in never being contagious, or having purple spots; or ever having a cadaverous smell; or ever being received from human effluvia; and in the delirium being much more impetuous. It is distinguished from inflammation of the brain and its membranes, by not having so vehement a fever, or redness and turgescence of the eye and face; or impatience of light or noise; or hard pulse; and by opposite causes, and opposite method of cure.

"*Method of Cure.*—A full dose of opium should be immediately administered in a glass of wine, and repeated in smaller doses for several hours successively; the quantity of which should be regulated by the constitution of the patient, habit of intoxication, degree of the disease, and other concomitant circumstances. The patient, if he eagerly request it, may be allowed to walk from room to room, and the most consoling language should be used by his attendants;—the debility of the system should be resisted by sherry gruel, cold wine, and porter and soup; which may be given in sufficient quantity, as the stomach in this complaint is very tenacious of what it receives. I never saw the bark, blistering, or affusion of cold water on the head, of any use. Every unnecessary restraint should be carefully avoided; therefore the strait-jacket, which is so universally employed, is the most injurious remedy that can be applied; for, by the perpetual efforts the patient uses to rid himself from confinement, he excites profuse sweating, debilitates the muscular fibre, and soon exhausts the vital principle. If the above mode of treatment be successful, or at least affords the unhappy sufferer a chance of recovery, the impoverishing the system by bleeding, strait-jacket, or abstinence, from invigorating remedies and diet, must be extremely mischievous."

The chief merit of Dr. Blake's essay consists in the division of delirium tremens, (for we will not quarrel about the name) into distinct stages. Indeed if we narrowly

watch all diseases, they will be found to consist of many stages of progression, each distinguished by peculiar features, and each demanding some modification of treatment. We have now exhibited the prominent features of the little volume before us, and return thanks to Dr. Black for the practical information which it contains.

XX.

ON STRICTURE OF THE ŒSOPHAGUS. By MR. MACILWAIN.

Compared with strictures of the urethra, or even of the rectum, the disease under consideration is very rare. Yet our author affirms that he has seen several cases of this afflicting malady. It usually occurs after the middle period of life. The disease is extremely slow in its progress.

"Stricture of the œsophagus may occur at any part of the tube; but as far as the cases which I have seen, or the preparations which I have examined allow me to offer an opinion, I should say, that they happen most frequently in the upper half of the canal. It is not, perhaps, important, could we do so, to fix the precise point at which they occur most frequently, but it has appeared to me that about opposite the commencement of the trachea is the most frequent situation.

"Examination of the strictured œsophagus presents various degrees of thickening of the tube. Sometimes a mere condensation of it, such as results from chronic inflammation; at others, the diseased part is hard, and when a section is made of it, it appears to be evidently of a carcinomatous structure. In some cases, the thickened portion is very small in extent, and the stricture marked by an acute membranous edge, such as would result from an imperfectly developed valvula connivens, only of a dense structure. I have also seen a fungous growth from the mucous membrane, narrowing its calibre so much as almost to render it impermeable. These appearances

may be accompanied by ulceration, and this may occur either on the ORAL, or, more frequently, cardiac side of the stricture, which may be more or less involved in it, or otherwise. The thickening may be an inch or two in extent, and there is one specimen in the museum of the college, in which nearly the whole tube is enormously thickened. A section has been made of it, and the diseased structure is seen interspersed by white fibrous lines, evidently those characterizing carcinomatous deposition. There is one fact which has occurred to me, in reflecting on the various preparations which I have examined, viz. that where the alteration of structure is near the stomach, it is more frequently the consequence of specific disease, than when it is found in any other part of the canal. If this be so, the fact is important, as I shall endeavour to shew, in speaking of the treatment. The remote causes of stricture of the œsophagus are very obscure; in some cases, the first difficulty in swallowing is described by the patient as having succeeded to some catarrhal affection, but more frequently there is nothing to be ascertained very clearly on the subject, neither have I been able, from the cases which I have seen, to connect the disease with any particular temperament."

The causes, however, of stricture of the œsophagus are very obscure. The progress and character of the symptoms are as follow:—

"A patient first finds that occasionally there is difficulty in swallowing, attended with a feeling of spasm, which presently subsides, leaving no inconvenience. For a time this occurs only after considerable periods, which become gradually shorter, but for a long time the patient swallows better some days than others, and frequently without difficulty. At length this becomes so augmented as to induce the patient to masticate his food more particularly, in consequence of fearing that a want of this caution will excite spasm, rather than from any suspicion that there exists already any mechanical obstruction. At this time the spasms usually become easily excited, and more or less distressing, until at length they are so

violent as to produce a sensation of suffocation, which alarms and distresses the individual in a most pitiable manner. The face on such occasions being very red, the eyes suffused, and the whole countenance expressive of the utmost anxiety: to these is sometimes added a partial rejection of the food. Experience has by this time most likely convinced the patient that any attempt to swallow firm solids will be unavailing, and the spasm excited by it so certain that the trial is avoided.

"The general agitation of the nervous system is now so considerable, that the very fear as it would seem of spasms renders the individual so excitable that these are sometimes induced without any attempt at deglutition. Mental agitation proceeding from any other cause will excite a paroxysm. In this way, not only at times when it is desirable to take food, but generally, the patient is kept in a greater or less state of agitation and alarm, and there is sometimes considerable pain described as shooting towards the back. This, with the small quantity of food usually taken, is productive of considerable emaciation; the countenance assumes an habitual expression of anxiety, and the whole condition of the patient is truly deplorable. If the case be unrelieved, or if it be of a specific character, the patient sinks under the continued irritation which these circumstances, combined with imperfect nutrition, create and maintain. Towards the latter periods, ulceration takes place, and there is great suffering. The ulceration may be confined to the inner surface of the tube, or may destroy it entirely in the part affected. There is a case in St. Bartholomew's, where the lower end of the œsophagus and a portion of the cardiac orifice of the stomach are thus entirely destroyed."

The treatment of strictured œsophagus must be conducted on the same principles that regulate our conduct in stricture of other mucous canals, with some little modification according to the probability or improbability of the existence of malignant disease. It is of great importance to ascer-

tain this question in all cases, as soon as possible, "since the same diligence which would relieve simple thickening, would, in all probability, aggravate a specific disease, and only hasten its fatal termination." There are, Mr. M. acknowledges, no certain signs by which this knowledge can be acquired; but the probability may be inferred, he thinks, from the following considerations.

"If a patient have suffered for a long time, say, from the earlier periods of life; if the difficulty of deglutition has very slowly and gradually increased, so that it may be fairly accounted for by the ordinary increase of stricture; if there have been no pain, but only distressing spasms, and if an external examination, conducted in a satisfactory manner, discovers no departure from the natural condition of subjacent parts, nor is productive of pain or tenderness; if with this the patient's health be tolerably good, notwithstanding considerable emaciation, and the countenance present no peculiarly unhealthy or disordered tint, but only that expressive of anxiety; if at the same time, there be no symptom of malignant disease existing in any other part of the body—it may be rationally hoped, that the case is susceptible of relief. If, on the contrary, the first symptoms have occurred late in life; if the progress of the disease has not only been attended with spasms, but with occasional pains when no spasms were present; if the progress have been rapid, not occupying, perhaps, from its commencing symptom, more than a year; or if, having been for a considerable period slow, and unattended by very urgent symptoms, the difficulty of swallowing have somewhat suddenly become augmented, and attended with pain at other times; if with these symptoms the obstruction be near the stomach, and there be occasional rejection of the food, and if the patient be advanced in life—the case is probably one of cancerous disease. When, in addition to all this, there be a sallow countenance, with tenderness in any region of the abdomen, or other evidence of much general or local disorder, the case may (with

reference to any practice adopted for its relief) be considered certainly one of specific disease."

The principal objects in the treatment are, to keep the alimentary canal and the œsophagus as tranquil as possible, while the stricture is dilated by the elastic gum or armed bougie according to circumstances. Generally speaking, enemata are more proper than aperients by the mouth in these cases. Leeches and counter-irritation are sometimes useful. The following case concludes the section.

"A lady, æt. 50, of an originally nervous temperament, was brought to me from a considerable distance from the country, for advice, in consequence of difficult deglutition. Her fears were so great on the subject, that she could be by no means persuaded to come to London for advice; this was effected by some friends here giving her an invitation to visit them as the avowed object, the real one being for the purpose I have mentioned. The first time I saw her she was considerably agitated. She gave the following account:—that for many years she had been subject to spasms in her throat, or occasional sensations of impeded deglutition; the precise period was not mentioned, but I have since ascertained it to have been not less than twenty years. These symptoms had increased in frequency and severity until she was unable to swallow any food which was not reduced to a fine pulp, either previous to her taking it, or by careful mastication; and even with these cautions, very small particles would occasionally meet with obstruction, and give rise to very distressing and even alarming spasms, from the feeling of threatening suffocation by which they were accompanied. Mental agitation would sometimes produce them without the aid of any attempt to swallow. With the cautions above mentioned, she was a very long time in taking even a moderate meal, and although naturally thin, she appeared evidently to have suffered further emaciation, partly the result of anxiety, and imperfect nutrition. In addition to all this, society for obvious reasons, had become irksome to her. Her general state of health appeared in

other respects tolerably good, if I except a torpid state of the bowels. The first thing that was done was to evacuate these by small doses of calomel and jalap, with a little ginger, given every four hours until the desired effect was produced. Her choice of food, and the cautions she exercised in taking it, rendered any particular directions on these points unnecessary. On the first attempt at introduction, I could not pass even a small varnished catheter; it seemed to enter the stricture, but would not pass through it. It excited severe spasms, the countenance became suffused, expressive of the greatest anxiety, combined with difficult respiration, the patient appearing in danger of suffocation, and rising from her seat in a very hurried and disturbed manner. Notwithstanding that she could ill manage deglutition of fluids, a mixture composed of powdered valerian, with tinct. castorei and mist. camphoræ, was prescribed, which seemed to quiet the nervous system generally. A tartar-emetic plaster was put along the line of the œsophagus, but this was soon after replaced by a plaister of belladonna, which seemed to be productive of advantage; the stricture was touched with a solution of argenti nitras, conveyed to it by a sponge. Leeches were also applied, and repeated previous to further introduction of the instrument. In about three visits, she could allow the instrument to be pressed lightly on the part for several seconds, and without exciting any such distress or spasm as had at first attended its introduction. At the next visit, I succeeded in passing a moderate-sized catheter, which was increased two sizes. At this period, she proposed leaving town, but said she would stay if I could say the precise time which would be necessary; but as I would not do this, I coincided in her wish of returning home, particularly as I was well acquainted with the ability of the gentleman under whose care she would be. She was extremely anxious to know my opinion of the result of the plan proposed to be pursued. The reasons which determined my answer may be gathered from the foregoing paper; the opinion given was, that by per-

severance in the plan she would be ultimately rendered very comfortable. This case is still under treatment, but as far as it has gone it promises to justify the opinion which has been given. As this paper was going to press, I wrote to Mr. Dyer, a very intelligent surgeon, of Ringwood, requesting him to inform me of the progress of the case, and also of the opinion he entertained as to whether the stricture was the result of common thickening or malignant disease. His answer I subjoin:—

“My dear Sir,—As the time is now arrived when you wished to hear from me, I have the gratification of informing you that our patient is still improving: the late changeable weather in some degree affected her general health, so as to excite spasms occasionally, but these I am quite satisfied depended on such circumstances, rather than on the local affection, in which opinion — now decidedly coincides. I keep to the last sized bougie, and, indeed, adhere altogether to the same plan as when I last wrote, and I do not see that we can deviate from it with any advantage. I often wish you could see her, to witness not only the ease with which the instrument passes,* but particularly the improvement in her general health, occasioned by its use enabling her to take her food in greater quantities, and with so much more comfort.— With respect to the point you hint at (which, indeed, is a most important one), whether the obstruction be the result of common thickening consequent on chronic inflammation, or whether it be the effect of any specific disease, I should certainly say, (bearing in mind the long duration of the affection, certainly more than twenty years,) this case has arisen from the former cause; for, had it been the latter, surely other symptoms would have arisen long ere this, and if not spontaneously, the means to which we have had recourse, would have been sufficient to

have excited them, and thus, instead of having lessened the mischief (which is beyond doubt) to have increased it. I think, therefore, there cannot be any question as to the nature of the disease, or that we have every prospect of ultimate success in rendering our patient comfortable. She is, unfortunately, of a nervous, irritable habit, easily excited, which has increased the difficulty with which we have had to contend.”

Mr. M. does not allude to the use of iodine in this affection. We fear that the disease is more frequently increased than improved by the interference of bougies.

XXI.

UTERINE SOURCE OF NEURALGIC PAINS.*

THE following case, taken from the books of Guy's Hospital, is adduced by Dr. Addison, as an illustration of the connexion between the condition of the uterus and local neuralgic pains.

“Elizabeth Harris, ætat. twenty-six, a woman of irritable habit, subject to frequent pain of the head and left side, with palpitations of the heart on the least exertion—her menstrual periods are regular, and generally attended with but little pain, but the discharge is usually rather profuse, with passage of clots, and lasting a week. Last Tuesday, while the catamenia were flowing, accidentally got wet by upsetting a tub of ice-water over her legs and feet; the discharge ceased almost immediately, but she did not feel any inconvenience until Wednesday afternoon, when she was seized with pain, first commencing at the scrobiculus cordis, but soon became fixed at the lower part of the abdomen. This pain gradually becoming more acute, she came into the hospital on Thursday afternoon (February 11th). At that time it was very severe; the abdomen acutely tender to the touch on first making

* “I sent this instrument to Mr. Dyer. As nearly as I can recollect, it is something less than half an inch in diameter.”

* Dr. Addison.

pressure upon it, but after continuing the pressure it was tolerated. Bowels had not been relieved ; pulse 120, but without jerk ; tongue slightly furred.

"When I first saw her she could not bear even slight pressure on any part of the belly, and as she was rather of a full habit of body, I ordered her to loose sixteen ounces of blood—to take a smart dose of Colocynth and Calomel, and to have the belly fomented with the Chamomile fomentation. As I was satisfied as to the character of the pain, you might perhaps have expected me to order, with moderate depletion, some form of opiate, either by the mouth or by glyster, with a view to relieve the violence of the pain ; whilst you were probably surprised at my giving the Colocynth and Calomel, as I have elsewhere said that such a combination usually irritates, and causes an increase of pain in such subjects. I adopted the practice, however, with a hope that this aloetic compound might, in conjunction with the bleeding and fomentation, bring about a return of the menstrual discharge, which I calculated, with tolerable certainty, would afford speedy relief. In the evening she experienced great aggravation of her pain, evidently from the irritation of the pills, so that at nine o'clock Mr. Dashwood gave her six drams of Castor Oil, applied thirty leeches to the belly, and repeated the fomentation. On the following day, her bowels having been freely opened, she obtained considerable relief, the severe pain only coming on at intervals, and being chiefly felt in the region of the sigmoid flexure. On the evening of the 13th, or the third day from her admission, she had a slight return of the catamenia, and next morning we found her entirely free from pain. In the evening, however, they again ceased, and at two o'clock in the morning the pain again returned in the lower belly. This pain gradually subsided under the treatment adopted, but on the 17th she was represented to be suffering from acute pain under the margin of the ribs of the right side. This was supposed by some to be pleuritic, but although it was manifestly increased by inspiration, it varied very much in its intensity, and at intervals

was very much aggravated, which, with the other symptoms and history of the case, left no doubt in my mind that it was abdominal and purely neuralgic. I applied a blister and gave the Conium. On the following morning she was nearly altogether free from pain."

In the above case, Dr. A. thinks it is impossible not to conclude that the state of the uterus and the neuralgic pain in the abdomen are to be viewed in the light of cause and effect, however that causation may be brought about. The case, indeed, is familiar to the observation of those who have opportunities of seeing the consequences of sudden suppression of the lochia shortly after delivery—the check being frequently followed by a severe neuralgic pain attacking the abdomen, more or less extensively in different individuals. Dr. A. does not think it improbable that some of those cases which have been published as anomalous forms of puerperal fever, may have partaken of the same nature as the painful affections of the abdomen to which he has directed the attention of his pupils and the public in the work which he has recently published, and of which we have given an analysis in another part of the Journal.

XXII.

UNIVERSITY OF LONDON.

Medical Diploma.

"In the 'Second Statement by the Council,' published before the opening of the University in 1825, it is announced that '*besides Certificates of the Professors, the University will grant Certificates of General Proficiency in Literature and Science. Every Student will be required to produce a certain number of Professors Certificates, before he can be allowed to enter upon the examination for the General Certificate.*'

The object in granting this Certificate, is to put the Student in possession of a document which shall be an evidence of his having acquired at the University a certain

amount of knowledge in the different departments of General and Professional Education. But to make the document practically useful, it must have such a *designation* as the person obtaining it can conveniently affix to his name and be called by; as is the case when he takes a Degree at an Incorporated University.

The Council have been for some time engaged in considering the Qualifications, Conditions, and the Form under which this Diploma shall be granted in the different departments of education; they have not yet settled what these shall be in any other than the Medical School, but expect to be able to announce the whole scheme before the conclusion of the present Session. Having come to a decision upon the Medical Diploma, the Council have thought it advisable to make it known before the Medical Students of the present Session shall be dispersed.

It has been resolved that the General University Certificate shall be granted, in the Medical School, under the following conditions and regulations, and that it shall be called 'THE DIPLOMA OF MASTER OF MEDICINE AND SURGERY IN THE UNIVERSITY OF LONDON,' (which may be thus translated and abbreviated, *M. Med. et Chir. U. L.*)

1. That the Candidate shall be Twenty-one Years of age.

2. That he shall have attended Lectures on Professional subjects, during three Academical Sessions of this University, and one winter Session of at least five months duration in any established school at home or abroad.

3. That he shall have acquired Certificates of Honor* in the following Classes in the University:

* "It is proper to explain to those unacquainted with the system of the University, that CERTIFICATES OF HONOUR are granted at the conclusion of each Session to the more distinguished Students in the several Classes. The distinction is conferred, if answers in writing to questions proposed during a very carefully conducted examination, shall prove that the student must have diligently attended to the instruction of the Professor."

PRACTICE OF MEDICINE,—ANATOMY,—PHYSIOLOGY,—SURGERY,—MIDWIFERY, and DISEASES OF WOMEN and CHILDREN,—MATERIA MEDICA,—BOTANY,—CHEMISTRY,—and ANATOMICAL DEMONSTRATIONS and DISSECTIONS.

4. That in the year which may be spent out of the University, he shall have attended Lectures on two different professional subjects, each Course of such Lectures being of at least five months duration.

5. That he shall have attended the Medical Practice of an Hospital, containing at least 100 beds, for twelve months; and the Surgical Practice of the same Hospital, or another Hospital of the same number of beds, for the like period of twelve months.

6. That he shall be required to translate a passage in writing from Celsus, Gregory, Heberden, or other Latin medical author.

7. That having complied with the preceding regulations, he shall write an Essay in the English language on some professional subject, chosen by himself, and approved of by the Faculty of Medicine before the Essay is composed. That this Essay shall be read in whole or in part, as the Faculty may desire, at a public meeting in the University; and that the Candidate shall be called upon to explain or defend the doctrines maintained in his Essay. That he shall also make an Anatomical Demonstration, and be examined upon any part of his professional studies on which the Faculty of Medicine may think proper to propose questions.

In proposing the above regulations for conferring an honorary distinction, suited to Surgeons and General Practitioners, the Council have thought it proper to require attendance on those Classes only which are necessary for obtaining the Diploma of the College of Surgeons of London, and Society of Apothecaries. But they are desirous that the attention of Medical Students should also be particularly directed to the subjects of CLINICAL MEDICINE, COMPARATIVE ANATOMY, and MEDICAL JURISPRUDENCE: and it will also be a great recommendation to

candidates that they should possess some knowledge of MATHEMATICS, NATURAL PHILOSOPHY, and NATURAL HISTORY. The scheme of instruction in the University affords ample opportunity for such studies; and a diligent Pupil, during the period prescribed by the Regulations, may obtain respectable knowledge in several of these departments, without interfering with the more direct object of his pursuits.

The Diploma will be conferred in public on the 23d of December in each year, or the 22d, if the 23d be a Sunday; and the Examinations will commence on the corresponding day of the preceding week. The Essay must be sent to the Secretary of the Faculty of Medicine on or before the 15th of November, and must be signed by the Candidate, with a declaration that it is wholly his own composition. In the event of Students leaving England, or in other cases of emergency, the Diploma will be granted at other periods of the Session, if the Candidates possess the necessary qualifications.

In selecting the designation, care has been taken to avoid all interference with the titles and privileges conferred by Chartered Bodies. The value of the Diploma to the possessor of it will depend upon its being known to be granted to those only who, after a strict examination, prove themselves worthy of such a distinction.

The following extract from a Report of the Faculty of Medicine, contains their views as to the good effects upon the education of Medical Students which this measure may tend to produce.

"The Medical Profession is divided into three classes: viz. Physicians, Surgeons and General Practitioners. The latter form by far the greater body, and until this University can give a Physician's Degree, not many of those destined for that branch of the profession can be expected to take any considerable part of their education in its Medical School.

"Under the appellation of General Practitioners are included two distinct classes of medical men. One of these consists of

practitioners who hold a highly respectable rank in the profession, and who have devoted much time, labour, and money to their professional education; men possessed of some attainments in the collateral sciences, and who, practising their profession in a liberal and scientific spirit, have the highest claim to the confidence of the public. Another class bearing the same appellation, consists of those who have acquired the right to practise by possessing only the *minimum* of knowledge by which the license can be obtained, earned by the smallest possible expenditure of time and labour, and who consequently have very imperfect professional attainments. The public possess so little knowledge of the details of a Medical and Surgical Education, that all the most serious duties of the profession are commonly confided, without inquiry, to any one who calls himself a general practitioner, and to such hands, especially in the country, the largest portion of professional duty and responsibility is intrusted.

'It becomes therefore a great duty for the University to endeavour to remedy the evil, as far as it has been the means of doing so, by holding out this honorary distinction as encouragement to General Practitioners to follow such a more extended course of study as the science they profess, and as the public interest require.'

(By order of the Council,)

LEONARD HORNER,
Warden.

*University of London,
24th April, 1820."*

XXIII.

ON AMAUROSIS. By JAMES J. KNOX,
M.D. &c.

In the tenth number of our highly respected Glasgow contemporary, for May of the present year, Dr. Knox has published a very valuable and practical paper on amaurosis, and promises to favour his brethren with a paper in continuation. It is one of those communications (somewhat rare indeed)

which we cannot much abridge without great detriment to the author. In giving it a wider circulation than it otherwise would have, we shall be doing no injury to the writer, and some benefit to our readers.

Recent investigations have proved that amaurosis depends on an affection either of the optic nerve or the retina, though pathological anatomy is not always able to explain the nature of the lesion. The affection comes on sometimes gradually, sometimes very suddenly—vision being occasionally lost in a single day or night. The symptoms, though very numerous, and sometimes rather doubtful, may be conveniently divided into those felt by the patient, and those seen by the practitioner.

"Although amaurosis does not uniformly commence with the same symptoms, still a troublesome sensation of vivid balls of fire shooting across the eye, and of an innumerable host of motes or black stars floating before it and intercepting vision, are amongst the first warnings which a patient about to be attacked with amaurosis receives. These bodies are sometimes fixed, and at others constantly floating before the eye; they are also of various colours, being at one time black, or green, and occasionally of a fine purple hue.

"The amaurotic patient invariably refers his blindness to the existence of these bodies, and hence it is, that they are so remarkably minute in their description of them. In fact, there is scarcely any thing, however ridiculous, with which at times they are not compared. At present, there is a patient under my care, who complains of vision being intercepted by a large greenish body constantly floating before the eye, and compared by her to a wave of the sea. In another patient, a black body resembling a finger stretches across the eye. They are also frequently compared to birds, insects, &c. It also sometimes happens that these moveable bodies unite, forming a thick dense mist or cloud, which completely obscures vision.

"Different opinions have been entertained regarding the cause of these bodies. Mr. Travers considers the fixed *muscæ* to be

caused by a deposition of organized lymph between the choroid and retina, compressing the papillæ of the retina, and the floating as merely a functional affection. Morgagni does not hesitate to express a belief that *muscæ volitantes* may arise from some injury done to the cells of the vitreous humour, from lesions of the optic nerve or retina, or from dilatation of the vessels which ramify through this nervous expansion. The pathology of *muscæ volitantes* does not appear, however, to be as yet known.

"Little silvery motes, together with a troublesome impression of the object looked at, remaining for some moments on the retina, are very common, and at the same time troublesome symptoms of amaurosis. These luminous sparks are most frequent during night, or when the eyes are shut, and are, as far as my observation goes very unfavourable symptoms.

"Pain, to a certain extent, is almost always a constant attendant on amaurosis. Its seat and nature varies, however, and tends in many cases to throw some light on the nature of the exciting cause: thus, an internal hemicrania with vertigo enables us to recognise amaurosis, as probably dependent on plethora. The pain may be deep seated in the eye-ball, with a constant feeling of fulness and weight, or it may be in the forehead and temple, and of a sharp darting nature. It may also be constant or fixed, remittent or periodical, and in other cases no pain whatever exists. In a patient affected with incomplete amaurosis, who saw objects of different colours, and was troubled with *muscæ volitantes*, a severe attack of headache came on regularly every afternoon; while he was perfectly free of pain during the remainder of the day."

II. The phenomena observed by the surgeon are of a much more positive nature. In many cases, indeed a single glance will detect the disease.

"A vacant stare of the eyes, with a rolling motion of the eyeballs, and inability to fix them steadily on any object, together with a degree of listlessness, or want of that animation so peculiarly characteristic of the

healthy eye in many cases assures us of the existence of this affection. Besides visible organic alterations may exist, either as regards the colour or structure of the eyeball. These changes, however, in the colour, structure, or form of the eyeball, it is not my intention at present to consider. Nevertheless it may be stated, that they may consist in diseases of the cornea, of the pupil and anterior chamber, or in opacity of the tunica vitrea and chrySTALLINE lens. The eyeball, too, is sometimes a degree less than the sound one, being apparently sunk in the orbit, and when pressed on with the fingers feeling as soft and yielding as a sponge.

"A change in the colour of the iris of the affected eye, is by no means unusual in this disease. The appearance which this membrane assumes, is regulated by its former colour, and will be more perspicuous when contrasted with the sound eye. This change in the colour of the iris, is always, as far as I have been able to observe, a mark of congestion, or deep-seated inflammation, more particularly if accompanied with a varicose state of the external vessels."

In a few rare cases our author has observed the anterior aspect of the iris become concave—for which it is very difficult to account. The iris becomes sometimes convex—a state, however, much more unfrequent than the former. An oscillatory motion of the iris is a very unfavourable symptom. Mr. Guthrie regards this vacillating motion, when combined with softness of the eyeball to the touch, as diagnostic of disorganization in the vitreous humour.

"Much information is to be derived in this disease from a careful examination of the state of the pupil. In the healthy eye, the pupil is always circular, and situated nearly in the centre of the iris. Its form and position varies much, however, in amaurosis. In some rare cases, as will afterwards be seen, it becomes perpendicularly oval, resembling the irides of the feline tribe; in others oblong; and even when it retains its natural form, it may be altered in position, being situated either higher or lower in the iris, to its nasal or temporal half.

The occurrence of the perpendicular or oval pupil, is always to be regarded as a very unfavourable symptom.

"An active, and lively pupil, readily obeying the different impressions of light, has been regarded as a favourable symptom in amaurosis, more especially if this takes place when the sound eye has been covered, showing that its movements are not from associated action; whilst a dilated and sluggish pupil little sensible to variations in light, has been regarded as very unfavourable. The degree of information, however, to be derived from the motions of the pupil, is rather of a limited kind, and not to be relied on implicitly. As in some cases of complete amaurosis, the pupil may be active and lively; and a dilated sluggish pupil may be found in others where no amaurosis exists. The pupil will be seen to have been active and lively, in the fourth case, to be afterwards related, although the amaurosis was complete. On the other hand, the pupil may be immoderately dilated, in consequence of adhesions formed between the posterior surface of the iris, and capsule of the lens, the usual result of *iritis* or deep-seated inflammation.

"In amaurosis the transparent parts of the eye, are subjected to opacities of different degrees, and kinds. Vision may be much diminished by depositions of lymph on the delicate structure of the retina, or on the surface of the lens; these, however, as they cannot be seen, do not fall to be considered here.

"A deep-seated opacity, of a pale yellowish green colour and shaded off towards its circumference, is one of the most frequent changes of the transparent parts of the eye in amaurosis. Considerable difference exists with regard to the intensity of this opacity; the humours being at one time perfectly green, and at another only observably opaque after a minute examination. In its appearance it is not unlike the cataract of old people, and from its situation may very readily be mistaken for such by the inexperienced. Mr. Travers has known the operation of extraction performed, in a case

where this opacity was mistaken for cataract. It is said to have its seat in the vitreous humour, or its capsule, and is always to be regarded as a very unfavourable symptom; although the same greenish appearance is frequently to be seen in the eyes of many old people in whom no defect of vision exists, farther than is to be met with at their advanced age.

"A greyish milky opacity is also sometimes met with in such cases, situated immediately behind the pupil, and which is much more readily mistaken for cataract. However, its comparative thinness, and depth behind the pupil, will in most cases serve to discriminate between them."

The causes of amaurosis are very numerous, and very opposite in their nature. Mr. Travers has divided them into functional and organic, and this classification Mr. Knox adopts.

Species 1st. Amaurosis from atony of the nerves of the eye. Suppressed, diminished, or abolished vision may be the result of atony of the nerves of the eye, dependant on general atony of the constitution. Whatever has a tendency to weaken the system generally, must operate in like manner on the nerves of the eye; hence it is no uncommon circumstance to find amaurotic affections arising from those general debilitating causes. Under this head, a number of exciting causes may be enumerated; such as excessive discharges of any kind, as leucorrhœa, too frequent indulgence in venery, long protracted lactation; intemperance, and probably typhus. I have only once met with a case of amaurosis, arising, as I thought, from long protracted lactation.—The patient was a middle aged woman, of a spare habit of body, and mother of a large family. She was almost perfectly blind. On examining her eyes, no morbid appearance was visible. She had been nursing nearly fourteen months, and was but poorly fed. A variety of means were tried, but without effect. A medical friend of mine informs me, that a lady, a patient of his, and the mother of a large family, invariably towards the termination of lactation, becomes troubled with amaurotic symptoms. The

same gentleman also informs me of a case having occurred lately in a wet nurse. Instances are on record of females being amaurotic during pregnancy, and recovering their sight after delivery. Those who are anxious of meeting with such cases, may consult Rolfino.

"The general habit of body, of a person labouring under this species of amaurosis, is leuco-phlegmatic. There is great lassitude and debility. On examining the eyes, the pupils are found to be dilated, and very sluggish. No organic change is visible in the interior of the eye, a circumstance denoting the purely functional nature of the affection. There is also a troublesome sensation of black motes, or stars before the eye, rarely any flashes of fire, and the pain when present is but trifling.

CASE 1. Amaurosis from Debility and Leucorrhœa.—Mrs. M. —, on application, complained of a diminution of vision. Pupils were enlarged and sluggish, but jet black; had occasional pain in the eye; complained much of general debility, and leucorrhœa. This patient was in a short time relieved by the use of tincture of iron, and an vapour of ammonia.

"CASE 2. Amaurosis from Intemperance. William Frazer, æt. 45, has all his life been subject to idiopathic weakness of sight; is a dram-drinker. A week previous to application, he lost the sight of the right eye, in the course of a day. A troublesome sensation of black stars, to use his own words, and of black objects, first warned him of its state. At present, he can discern nothing, not even strong light; pupil the same as the left one; both, however, are almost insensible to variations of light, but obey the belladonna; has no headach, or apparent plethora of head; has all his life had but a poor appetite, and weak digestion. Believes this attack to have been brought on, or hastened by getting tipsy three days before application. He was ordered a blue pill morning and evening, and a sternutatory composed of sulphate of hydrarg. et pulv. glycyrrhizæ, every night at bedtime. On the following morning, he stated that, during the action

of the snuff, he perceived his sight to return in some degree. Half an ounce of blood was taken from the angular vein, and two drops of vin. opii prescribed to be put into the eye every night. Four days after application, vision was much improved. The following embrocation to be rubbed on the forehead and temples every night. R Alcohol. ʒi. aq. ammon. ʒij. M. Has continued the use of the pills, embrocation, drops, and sternutatory, and can now see as well with the right as with the left eye; but observes, sometimes in the evening that its power of vision is suddenly obscured. Ten days after application, he was dismissed well."

TREATMENT.

"This is too often empirical—hence bleeding, blistering, mercury, &c. have been recklessly and indiscriminately employed, without ascertaining the etiology of the complaint—the first thing that ought to be done.

"The treatment of amaurosis from debility consists in removing the supposed cause, and in strengthening the system, by the exhibition of tonics and diffusible stimuli.

"To effect this, the whole class of medicines denominated tonics may be used with advantage; but the sulphate of quinine, and the preparations of iron, are most to be relied on. The carbonate, and tincture of the muriate, of iron, are the preparations of that metal that will be found most advantageous.

"Diffusible stimulants, by imparting a temporary excitement to the retina, are often of great service. For this purpose, a sternutatory composed of the sulp. hyd. flav. and pulv. glycyrrhiza, in the proportion of a scruple of the former to an ounce of the latter, answers the purpose well. I have often seen very great advantage derived from their use. The vapour of ammonia received on the eyeballs is also worthy of a trial. An embrocation composed of alcohol and ammonia, in the proportions used in case second, may be rubbed morning and evening on the forehead and temples with advantage.

"Bloodletting, and the use of mercury, are, in most cases of amaurosis dependent on debility, injurious. Blisters are sometimes useful, and may be applied behind the ears, on the temples, and on the forehead, but they ought not to be kept open, as every drain on the constitution is hurtful.

"*Species 2d. Amaurosis from Plethora.*—Amaurosis may arise from a state of the system the very reverse of the above, viz. from plethora. When amaurosis depends on a plethoric state of the system, the symptoms are very unequivocal. There is a florid complexion, with more or less tumefaction of the face; vertigo, with a feeling of fulness and weight in the eyeball and head; the pupil is also sluggish and dilated. All those causes which have a tendency to increase the activity of the system, powerfully predisposes to this species of amaurosis. Among them may be ranked high living, and perhaps the sudden suppression of any accustomed discharge, as epistaxis, hæmorrhoids, or the catamenia. In the case of Turnbull, afterwards to be related, it will be seen that many years previous to the attack, he had been subjected to hæmorrhoids, and that, on their cessation, amaurosis supervened.

"A temporary determination, or congestion of blood, may also take place in the eye and brain of patients who are not otherwise of a full habit of body, and thus give rise to amaurotic symptoms. I have lately observed this in a patient under my care, with disease of the heart, who became alarmed at finding the sight of one of the eyes failing, and, at the same time saw objects double and very indistinctly. When the temporary irritation ceased, the balance of the circulation was restored, and the amaurotic symptoms disappeared.

"The effects produced on the retina by congestion, or determination of blood, are probably pressure on its delicate structure. It is difficult to draw the line of distinction between inflammation and congestion; and it is, therefore not improbable, that some of the products of that process, such as thickening and lymphatic deposits, may be found on the retina. This opinion is strengthened

by the fact, that, even after the determination has been relieved, amaurotic symptoms continue, until those means calculated to remove depositions of lymph have taken effect. The central artery of the optic nerve becoming distended with blood, is also capable of producing a powerful pressure on its substance; and, besides, when it is remembered that the choroid coat, immediately exterior to the retina, is composed entirely of blood-vessels, it is easy to imagine how its delicate structure may be compressed against the vitreous humour, and thus paralyzed, when its vessels become turgid with blood. That this actually does take place, is clearly proved by the signal relief experienced when blood is abstracted in such a case.

"*CASE 3. Amaurosis from Suppressed Catamenia.* A young robust woman applied on account of a diminution of her vision. Saw objects dimly, and covered with mott; pupils were enlarged, and sluggish, but jet black; eyebrows, also, were swollen, and felt heavy. Stated that the disease came on a month previous to application, after a sudden suppression of the catamenia. An emetic with emmenagogue medicines were prescribed. Three days after application, a great change to the better, saw objects clearer and free from mott; eyelids, however, still appear swollen, in consequence of which she was bled to twelve ounces, and in a few days dismissed cured.

"*CASE 4. Amaurosis from Plethora, with Moveable Pupil.* Mr. — applied on account of nearly a total loss of sight in the left eye, and diminution of it in the right. He lost the sight of the left eye a year before application. The iris was of a deep green colour, and the pupil readily obeyed the different impressions of light. After the application of the belladonna, the humours were observed to be slightly muddy. He could not distinguish the outlines of large objects with the left, and, with the right, was only sensible of the difference between light and darkness. The eyeball was of its

natural size, and firm to the touch; the other membranes were, natural in appearance. At the time he lost the sight of the left eye, he had no pain or uneasiness in it. A variety of remedies were adopted in this case without the smallest benefit. They were the following:—Repeated blood-letting and blistering, a course of mercury of four weeks' duration, and the application of the opiate wine to the eyes.

"*Treatment.* The treatment of this species of amaurosis consists in adopting all those means which are calculated to lower the tone of the system. Hence the abstraction of blood both local and general, together with abstinence, are chiefly to be relied on. The quantity of blood to be taken must be regulated according to the constitution of the patient, and repeated as often as necessary.

"It sometimes, however, happens that when the balance of the circulation is lost, that abstraction of blood produces only a temporary relief. I once met with a case of this kind. The patient was a strong athletic man from Ayrshire, who applied to me, in February, 1828, in consequence of a loss of vision. This patient bore evident marks of plethora; the face was full and florid; pupils enlarged, and sluggish; the external tunics were also varicose, together with a vascular zone between the sclerotic and cornea. He was cupped on both temples, and put on a course of mercury. For a few days, vision was much improved, but symptoms of congestion returned, and it became as bad as ever. The same thing happened again and again in despite of repeated bloodlettings, and at last he was dismissed uncured.

"Next to the abstraction of blood, the exhibition of mercury operates most powerfully in arresting the progress of inflammation. This is most beautifully seen in iritis, when, as soon as that mineral has taken effect, a decided check is given to the inflammation, and the already effused lymph is absorbed. The same thing happens in congestion, or inflammation of the deep-seated parts of the eye. The bowels must

also be kept freely open, by means of saline purgatives combined with antimonials. — Blisters should be frequently applied, and a constant discharge maintained, by means of of an issue in the nape of the neck. The diet must also be strictly antiphlogistic. When there is reason to suppose the attack brought on by the sudden disappearance of any accustomed discharge, medicines, calculated to re-establish it, should be administered. The hair on the head should also be kept short.

"*Species 3d. Amaurosis from Sympathy.* Amaurosis is also sometimes produced from the retina sympathizing with some other part of the body. This species might with propriety be called amaurosis sympathetica, vel gastrica.

"The remote sympathies that exist between the different parts of the body, are often truly astonishing, and with none are these more strikingly exemplified, than with the abdominal viscera. Hence amaurotic affections are often produced by gastric impurities, and derangements of the primæ viæ. Many examples are on record of amaurosis being produced by a disordered state of the alimentary canal, as well as after eating a hearty meal. The most marked example, however, of amaurosis being produced from sympathy, is that which is often met with in children troubled with worms. I have only once met with a decided case of this kind. The patient, a child seven years of age, was brought to me in August 1828. The case is entered in my eye case book as corneitis of left eye, with sympathetic amaurosis of both from worms. Small doses of calomel and scammony were prescribed with the happiest effect, a great number of ascarides being discharged. In proportion as these were removed the amaurotic symptoms disappeared. The following in general will be found to be the symptoms, when amaurosis is produced by worms. Eyeballs natural in appearance, pupils very much dilated and sluggish, but jet black, belly generally tumid, or enlarged, appetite voracious, with picking at the nose.

"One of the most remarkable, and at the

same time distressing cases of amaurosis from sympathy that I have heard of, occurred lately. The patient, a young lady, had a needle in the ribbon around her waist, which accidentally run into the hand near the wrist, and broke. The family surgeon had to be sent for to remove it. Severe pain was experienced at the time, and continued for some time afterwards. She became on the following day (I believe) amaurotic of one eye, and of the other also in a few days after.

"This and the first species of amaurosis are the only instances, as far as I have observed, that are ever remittent, intermittent, or periodical. For those cases which depend on the greater clearness of one day, or part of it, over that of any other, are not to be considered either as remittent, or periodical, as they obviously depend on the degree of light presented to the eye, and not on any variation of the powers of vision. They also admit of being oftener cured, than any of the other species, because they do not depend on any organic change of the eye, or its appendages, and hence it is that the pupil in them is always jet black.

"*Treatment.* It is in this species of amaurosis that the emeto-purgative plan of Scarpa and Richter will be found most serviceable. If, as sometimes happens, the amaurosis should have succeeded a hearty meal, and there is reason to suppose that the disease is produced by it, an emetic should be administered, and repeated at proper intervals. The bowels ought also to be kept freely open, with pills composed of calomel and colocynth, or any other strong purgative.

"When worms are the supposed cause of the affection, medicines calculated to remove these should be administered. A combination of calomel and scammony I have found a most valuable anthelmintic. Turpentine enemata are also highly beneficial.

"The treatment of sympathetic amaurosis from wounds, must be regulated by existing symptoms. The free division of the part as recommended by Beer and others in amaurosis consequent from wounds

of the superciliary nerves should not be lost sight of, as in some cases of the above description, it has been found serviceable. Strict attention must also be paid to the state of the alimentary canal."

We shall be very glad to see the second part of Mr. Knox's paper, and hope to profit by its perusal.

XXIV.

ON THE DISEASES OF INDIA. By JAMES ANNESLEY, Esq. Vol. II. Continued from Vol. XI. of this Journal, page 512.

I. *Cursory Remarks on the Presence of Worms in the Large Bowels.*

Intestinal worms are very frequently met with between the tropics. Among Europeans they are generally the consequence of torpid bowels, or accumulations of morbid secretions in the alimentary canal. Ascarides, Lumbrici, and Tæniæ are the most frequently observed. Among the natives there are scarcely any free from these parasitical animals.

"It will generally be found amongst the natives of warm climates, and among those Europeans who have been much weakened by their residence in them, that the secretions, which form the principal part of the fecal discharge, are seldom thrown off from the mucous surface of the large bowels in so quick a manner as in the robust individual who enjoys an energetic state of the circulation and of all the organic functions; and being thus retained, they form at least the soil in which worms are reared, whatever may be the primary source from which these creatures proceed. Hence the importance of endeavouring to prevent the retention of morbid secretions and fecal matters, and to impart energy to the digestive functions generally.

"The possibility of worms perforating the parietes of the intestines has been argued for by some pathologists, and denied by others. Without pretending to decide the

question, we shall adduce the particulars of a case which came before us, in which the parietes of the bowel must have been perforated by them; but whether the perforation was effected previous to inflammation and ulceration having been excited in the part of the intestine in which they were lodged, or subsequently to that event, is a point which cannot be determined, from the imperfect history of the case, to which we were called only in its last stages.

"CASE—In which *Lumbrici* passed from an opening at the Umbilicus.

"August 5th, 1820.—J. W———, four years of age, according to the account furnished by his father, began to complain, about three months since, of swelling and hardness about the umbilicus, with pain on pressure. Opening medicines were prescribed by the medical man in attendance; and afterwards, finding that the tumour did not subside from their operation, poultices were applied. From the middle of April, the time at which the hardness was first detected, until the end of July, it gradually increased. The bowels, however, were always regular, even without the assistance of medicine, and the appetite was unimpaired. During July the swelling had increased considerably, was fluctuating, and slightly inflamed. The child's temper became irritable, and considerable symptomatic fever, with loss of appetite and cerebral irritation, supervened. Animal food was now abstained from, and saline diaphoretica and laxatives were given. On the 1st of August the abscess broke through two openings in the umbilicus, and discharged a great quantity of thick offensive matter. The usual dressings were applied. On the 2d, about a pint of yellowish watery fluid was discharged, with some thick offensive matter, similar to that which passed on the preceding day; and as a substance appeared to protrude through the aperture, which the father of the child fancied was the bowel itself, he became alarmed, and sent for us. We immediately drew from the opening two large lumbrici. This was the first time of our seeing the case. After this the child lived several

days: the feces, with eight or nine large lumbrici, passed through the opening at the umbilicus, and very little by the anus, during this period.

"On examination, the lower part of the ilium was found obstructed, its convolutions agglutinated together, and its canal, in parts, constricted to the size of a goose quill. It presented no marks of recent inflammation, and was of a pale colour, both externally and internally. The agglutinated mass of small intestines adhered also to the abdominal parietes, around the umbilicus; and one of the most superficial convolutions of the intestine had an ulcerated opening through it, communicating with the external aperture at the umbilicus. The other abdominal viscera were natural in appearance."

In respect to the treatment, Mr. Annesley has not any thing new to offer. After proper purgation has been pursued to clear away the nidus of the worms, he was in the habit of prescribing enemata of castor oil and spirit of turpentine with great advantage. After this tonics were ordered. In cases of tænia, the oil of turpentine was advantageously given by the mouth, as also the bark of the pomegranate-tree.

II. HEMERALOPIA, OR NIGHT-BLINDNESS.

This curious affection is very frequent between the tropics—especially among the natives of India. Mr. Annesley conceives that whatever be the peculiar condition of the sensorium or retina, in hemeralopia, the cause is debility, "accompanied with accumulations of morbid secretions in the primæ viæ, more particularly in the cæcum and colon, together with torpid function of the liver and stomach." The disease among the natives is usually induced by insufficient nourishment and inattention to the bowels. He has frequently found a well-regulated diet and purgative medicines sufficient for the removal of hemeralopia without any other remedy. Among Europeans the purgative medicines are essentially necessary, and they generally bring away copious, offensive, dark-coloured gelatinous stools,

when the bowels become more sensible to purgatives, and then smaller doses suffice. Among debilitated Europeans and natives, generous diet and tonics are afterwards necessary, in order to prevent the generation of worms.

III. FURTHER REMARKS ON ACCUMULATIONS OF MORBID MATTER IN THE BOWELS, AS A CAUSE OF NERVOUS AND OTHER AILMENTS.

Our author commences this sub-section by remarking that, when the cæcum and colon become loaded, they disturb other viscera mechanically by pressure. Thus the right iliac veins and nerves are pressed upon by the distended cæcum, hence, he thinks, pains of the right lower extremity, or even partial paralysis. When the collections take place in the sigmoid flexure of the colon, the same phenomena take place in the left side.

"In addition to these symptoms, patients thus circumstanced frequently complain of pains in the loins, with occasional disorder of the urinary secretion, which is generally of a deeper colour than natural, and either depositing a very thick sediment, or exhibiting a very thick, mucous-like cloud, or both. When the fecal accumulations are carried to the greatest height, then, in addition to the above ailments, or even independently of them in some cases, an œdematous state of the lower extremities supervenes, with an inability to use them, or at least a difficulty in subjecting them to the least voluntary exertion."

Mr. A. does not deny that there may be other causes for these symptoms; but merely asserts that this is one cause. He thinks the same collections of morbid matters are often the cause of rheumatism and gout. The functions of the liver are deranged in this way—but hepatic disorder is not seldom the precursor and cause of the intestinal accumulations. The distention of the bowels by flatus or more ponderous materials, will also embarrass the function of the lungs and the action of the heart. Indeed our author is inclined to trace almost all the diseases of the liver to this loaded state of the

bowels—having, no doubt his worthy chlopoietic master, of Bartholomew's, in view. It need hardly be added that the *methodus medendi* is reiterated purgation of the most active kind. The following is one of the best and most interesting cases which Mr. A. has adduced under this head. We shall give it unabridged.

Case of Accumulations in the Cæcum and Colon, occasioning Anomalous symptoms.

"Mrs. —, aged about 27, had long been subject to daily paroxysms of fever; her hands were dry and white, as if powder lodged in the pores of the skin; the nails so as not only to break easily, but to chip off in small flakes in every part of them. She had constant heaviness and noise in the head, with extreme pain supervening occasionally at the back of the neck, also weakness of sight, and a morning sleep invariably threw her into profuse perspirations. For these complaints medical advice had frequently been resorted to, but without advantage. Towards autumn the disorder assumed an intermittent character and in the second week of October, 1822, medical advice was again called in.

"Her side was now submitted to the pressure of the hand, but as it was examined only to the termination of the ribs, she felt but trifling inconvenience from the touch; between the false ribs, however, and the umbilicus, the pressure of the hand occasioned the most acute pain; and her medical attendants immediately pronounced her liver diseased. Morning perspirations continuing, she was ordered to rise as soon as she awoke from a first sleep, however early it might be. This was of little avail, and decoction of bark was administered, which checked the perspirations for a time, but affected the head, and occasioned so much pain in the throat and stomach, attended with a burning and smarting sensation, that she was obliged to discontinue it. These sensations she began to feel after taking the first draught; and the slightest exertion, even lifting a chair, or walking across the room, would produce such extreme dryness

in the throat as frequently to compel her to take some fluid to enable her to speak.

"She soon afterwards experienced increasing pain in the side and head; her spirits fluctuated, and sometimes became so depressed as to terminate in hysteric affections.

"She was now quite unable to lie upon her right side, as the least pressure occasioned acute pricking pain between the short ribs and the hip; and when lying upon the left side she had the sensation of heaviness and a dragging from the right; also, according to her own words, a pain down the middle of the body, from the chest to the umbilicus, as if the position in which she was placed had occasioned the liver to press upon the alimentary canal; she, therefore, invariably slept upon her back for many weeks. She also felt great difficulty in using her right arm, as the use of it produced heat and pain in the side and chest.

"Still her appetite was tolerably good, but she frequently felt compelled to sleep after dinner, particularly if she dined late; and she always found herself more comfortable when she divided the day so as to have her meals (breakfast, dinner, and tea,) at nearly equal distances of time.

"In the beginning of February, 1823, she stooped one day hastily to tie her shoe: this exertion soon proved to her how much the malady had increased. Acute pains succeeded, and in the night a violent attack of spasm. Some time after this she stooped suddenly to the right side, when she instantly suffered a most severe pain in the soft part of the body, between the ribs and hip, with the addition of feeling near the groin as if a horny substance were piercing the intestines; and spasms succeeded in the night, as before. She now every day felt increasing indisposition, weakness in the knees and ancles, a sensation of fulness in the right leg, with general debility; and the thumb of the right hand suddenly swelled, and became entirely useless.

"The direction that the pains of which she complained now took, was from the throat to the abdomen, in a straight line,

branching off from the chest under the ribs, to the hip, where it divided and extended to the right side of the spine, at the *small* of the back, and round the hip to the right groin, where the pain was much more acute than in any other part, if I except a small part close to the spine, which was very painful when touched, although the hand extended across the back at that spot, by giving support, enabled me to hold myself perfectly erect, which, without this, I was unable to do. She also had some pain about the sigmoid flexure of the colon; but this was so slight that it was not much regarded.

"Her bowels during the long period of her ailments were very irregular. They were generally costive, but sometimes irritated, the evacuations being frequent, yet scanty, and occasionally attended with some degree of tenesmus. She had taken purgatives, but without relief, and had previously suffered from hæmorrhoids and slight sense of scalding in the urethra. The catamenia had not been materially deranged.

"The above are the most material particulars contained in a long history of her case, drawn up by herself at our request. On the first occasion of our seeing her, we examined carefully the abdomen, particularly over the cæcum and in the course of the colon; and we paid especial care to ascertain the existence of diseased liver. The region of the cæcum was unusually tumid, and very painful to the touch, with an inelastic hardness, extending in the course of the colon, under the right ribs, and across the epigastrium. Her countenance was dusky, and deficient in clearness. The tongue foul and the body emaciated. The cause of her ailments seemed to be perfectly evident; and we accordingly directed a pill, consisting of the blue pill, with the aloes and myrrh pill, to be taken at bed time every night; and a mixture of the compound infusions of senna and gentian, with the sulphate of magnesia and tincture of cardamoms, in the morning. These were continued daily, without intermission, excepting in as far as that calomel was combined with the aloes and myrrh every third or fourth night, for some time, until the morbid accumulations

seemed to have been carried off. After a few days the evacuations became more copious and more morbid and the quantity of disordered matters brought away astonished the patient. As these were removed, her health improved; the distressing symptoms gradually disappeared, and by continuing the pills and mixture, so as to procure at least two full evacuations daily, her recovery became complete."

A case is next related of a young lady, who had been remarkably healthy for the first ten years of her life, when she began to lose flesh without any visible causes. About the age of twelve years, when Mr. A. saw her, she was affected with severe spasms almost daily—her bowels were irregular, and, when she took purgatives, the motions were black and fetid. On examination, a very considerable fulness was observed in the region of the cæcum, and the whole abdomen was found to have a tumid and doughy feel, as if the bowels were loaded. The tongue was foul and spotted, being white, with little red spots. The appetite was good. The spasms came on suddenly, and sometimes when she appeared to be in the best spirits. They affected the chest and respiratory organs. A regular course of purgation was directed.

"Calomel, in six and eight doses, was given every night at bed-time, with an aperient draught in the morning, for six nights. The motions were extremely morbid, dark coloured, of clay consistence, and mixed with gritty matter. From these morbid motions having been increased in quantity, as the calomel and purgatives were repeated, the family were impressed with the conviction that the medicines taken were really increasing the disease; but as the spasmodic affection diminished in frequency and severity, as the accumulated matters were removed from the bowels, and as she was not at all weakened by the purgatives employed, but, on the contrary, strengthened, the purgative plan was continued for a month, occasionally intermitting the calomel, as this medicine was given entirely with a view of separating the viscid.

secretions which lined the alimentary canal, and facilitating their removal by the purgative exhibited in the morning. After this time, calomel combined with scammony, occasionally with aloe and the blue-pill, *ippecacuanha*, &c. were given, always avoiding the effects of calomel on the salivary glands; and the aperient was continued every morning. This plan was regularly persisted in for several months, varying, of course, the prescription according to circumstances; and the mass of *heavy, clay-like matter*,—of a dark-blue at times, sometimes quite black, at other times brown and green, with a sediment of a dark colour, having the appearance of sand,—which was brought away, can scarcely be conceived, except by those who saw it; and as this matter came away the child improved.

"This plan has now been continued for about two years; and although spasms occur once in six or seven months, the young lady is perfectly well. She grows, and is in good health and flesh. The abdomen is now perfectly elastic and natural, and the tumour at the *cæcum* entirely removed."

A case is next related of a young lady who had complained for several years of a sense of fulness and uneasiness in the right iliac region, with distention in the abdomen and oppression at the precordia. Head-ache, spasms, slight convulsions, hysteria, &c. were added to the list of anomalous symptoms. The bowels were costive, the catamenia regular. On examination of the region of the *cæcum* there was evident fulness, with tenderness there. Blue pill, aloe, myrrh, &c. were given at night, and the black draught in the morning. These remedies were continued regularly, a full dose of calomel being given every third or fourth night. The alvine evacuations were, at first, offensive and tenacious, but not abundant. They afterwards became more copious and morbid, of a dark brown and olive colour, and for several weeks continued so. The pain in the region of the *cæcum* becoming more acute, leeches were applied there, followed by poultices, with relief. Two month's perseverance in this plan was crowned with

success, the anomalous symptoms all disappearing with the cause of them.

The subject of dysentery will require a separate article.

XXV.

OBSERVATIONS ON THE BLOOD. By WILLIAM STEEVENS, M.D.

At a late meeting of the College of Physicians, a paper on the above subject was read by Dr. Steevens, who has, for many years, been a practising physician in the West Indies. As the views which Dr. S. entertains are novel, and the means which he proposes for combating a dreadful scourge of the human race, are simple and practicable, we have endeavoured to collect the substance of the writer's observation as accurately as possible, to lay before our readers.

Dr. S. sets out with remarking that a malignant form of yellow fever is sometimes seen in the West Indies, which, from beginning to end, evinces, by the symptoms, little or no affection of the solids, and leaving, after death, no cognizable trace of disease in the brain, stomach, intestines, or other viscus, whose derangements are supposed to be the cause of fever. In those fatal cases, there is no excitement, in the commencement, adequate to the injury of organs, and we can only ascertain the real cause of death when we come to open the heart, and find in its cavities, a dissolved fluid almost as thin as water, and black as ink—a fluid evidently incapable of stimulating the central organ of the circulation or of supporting life. The fluid is equally black and thin throughout the vascular system, all distinction between arterial and venous blood being obliterated.

An attentive observation of some cases of fever first led the author to believe that, in this disease, the influence of the nervous system is less operative than is generally supposed, and that the blood is infinitely more concerned than the solids, in an etiological point of view. He was thus led on, not only to attentive observation, but to ex-

periments on the state of the blood in fever, some of which he has now submitted to the profession. The writer remarks that it has been fashionable, for more than a century, to overlook the pathology of the fluids; yet to the practical physician, the morbid changes which the blood undergoes is valuable beyond all calculation.

On examining, after death, the black and dissolved blood that has been taken from the hearts of those who have died of the yellow fever, it was evident that great changes had taken place. *First*, the blood was more fluid, partly from an excess of serum, probably produced by a stoppage of all the secretions—partly, perhaps, from the non-formation of fibrine in fever, or its more rapid exhaustion than in health. In the first stage of the disease, the structure of the red globules is frequently deranged, as is evident from the colouring matter being often detached from the globules, and dissolved in the serum, giving to that part of the blood, when it separates from the fibrine, a bright scarlet colour. As the disease advances, this red colour is lost, and the whole circulating mass becomes black and thin. *Secondly*, in reference to the change of colour in the blood, both venous and arterial, Dr. S. has frequently filled one glass with the black fluid taken from the heart, and another with the black vomit taken from the stomach—they were so similar that it was almost impossible to distinguish the one from the other. *Thirdly*, in violent continued fevers, the saline matter, like the fibrine, appears to be exhausted faster than it enters the circulation. The blood soon loses a great portion of its saline impregnation, and the entire of its saline taste, the cause of which, the author afterwards endeavours to shew, is owing to the loss or great diminution of the saline matters. *Fourthly*, the blood, though dissolved, was not putrid—the latter state being, indeed, incompatible with life. But dissolution he considers as the first step towards putrescency—and the cause rather than the effect of death; because he has seen the blood before death, so black and so thin, that it could scarcely be retained

within the vessels—oozing from the tongue, the eyes, the skin, and other surfaces.

Conceiving, then, that this dissolved state of the blood was the cause of death, the great object of inquiry was to find out an agent capable of preventing this fatal change. In all climates, Dr. S. observed, the waters of the deep were preserved from putrefaction—and this preservation, he thinks, is probably owing to their saline impregnation. It is also well known that some of the saline medicines possess great antiseptic powers. Saline matters are invariably found in healthy blood, and as these were invariably lost or greatly diminished in the blood of fever patients, Dr. S. was naturally induced to try the effect of saline medicines, in preventing the bad symptoms of tropical fevers. The result of experience, he avers, was a conviction that those agents had, when used at a proper time, a specific effect in preventing the dissolution of the blood. In all the cases where they were timely and properly used, they prevented the fetor of the breath, the stoppage of the secretions, the yellow colour of the skin, the black vomit, and the other fatal symptoms, so common in those cases where these medicines were not administered.

Our author observes that one common property of neutral salts is that of giving a rich arterial colour to venous blood. This property is common to them all, and the degree to which they possess it, is, perhaps, the best test of their purity as saline agents. To ascertain the effects of different agents on the blood, he made a number of experiments, in which it was observed—

1st. That all the acids give a dark colour to healthy blood, and in proportion to their strength, change it from red to black, as certainly as they change vegetable colours from blue to red. Even the vegetable acids so completely blackened the blood, that the addition of a little water converted the whole into fluid exactly resembling the black vomit. *Secondly*, the pure alkalis have a similar effect with the acids, in changing the blood from red to black, though not in the same degree. *Thirdly*, the neutral salts immedi-

ately changed the venous blood from a dark modena red, to a bright arterial colour. Even those salts that contain a slight excess of alkali, the sub-carbonate of soda for example, immediately give to venous blood a beautiful bright arterial colour. The effects of these experiments are best seen when made on healthy blood. The agents ought first to be dissolved in a little soft water, and then well mixed with the warm blood, before it begins to coagulate.

4thly. When the neutral salts are mixed with the dark and dissolved blood that had been taken from the hearts of those who had died of yellow fever, even the black and dissolved fluid was instantly converted from a black to a bright arterial colour.

The nature of this paper (said Dr. S.) prevents me from entering minutely on the important effects which this saline impregnation produces in the vital fluid; but, in a work, which will soon be published, I shall endeavour to prove, first, that the blood owes its red colour to this saline impregnation. Black appears to be the natural colour of the colouring matter; for, when we take a clot of blood, and deprive it completely of its saline matter, by immersing it in fresh water, the colouring matter soon becomes so black, that even oxygen has no effect in changing its colour. But, when we immerse this black clot in an artificial serum made by dissolving some saline matter in water, the black clot in this clear fluid assumes almost immediately a beautiful bright arterial colour. Secondly, that, to this saline the fibrin owes its fluidity: for it remains fluid only while mixed with this saline matter, and becomes solid when the saline matter leaves it to unite with the serum. Thirdly, that the change of form which this saline matter undergoes, when the blood changes from arterial to venous, and from venous to arterial, alters its capacity for caloric, and gives it an influence in supporting the temperature of the system. The saline impregnation also adds to the stimulating quality of the blood, and assists, even in a high temperature, in adding to its powers of self-preservation.

In the present state of our knowledge, both of pathology and animal chemistry, it is, Dr. S. justly observed, best to rest simply on facts. Those which he has endeavoured to establish in his inquiry are partly the following:—1st. That, in violent continued fevers, even where proper means are used to protect the organs, by reducing the excitement, chemical changes often take place in the whole circulating mass; and, in these fevers, such changes are almost always the sole cause of the mortality. In proportion as the disease advances, the blood loses its solid part, and becomes thin. It loses its saline matter, and becomes both black and rapid. It loses its preservative power, and goes fast to decay. It loses its vitality, and soon becomes incapable of stimulating the heart or of supporting life. In the yellow fever, in the African typhus, in the plague, &c. the dissolution of the blood is a common cause of death. The typhus of cold climates is, comparatively speaking, a mild disease; but even in the common typhus, Dr. S. thinks that similar changes take place in the blood, though in a less degree. 2dly. In all cases of bad fevers, the loss of the saline or preservative power appears to be, in every instance, the chief cause of the entire dissolution of the vital fluid. 3dly. Where (says Dr. S.) proper means are used to protect the organs from the increased excitement, during the early stage of the disease, and after the excitement is sufficiently reduced, when proper nourishment is given and certain saline medicines are timely and judiciously used, the bad symptoms are generally prevented. When proper saline medicines are used, they do not fret the stomach, they act on the intestines as much as is necessary, they keep up all the secretions; particularly that of the kidneys, and enough is absorbed to enter the circulation and prevent the dissolution of the blood, and preserve it until the fever abates, and all the danger is past. This I am warranted to state as a fact, inasmuch as the treatment was commenced in the West Indies, in 1827, and since then it has stood the test in several hundred cases of the West India fevers, where it has been tried both by myself and others, and with

scarcely a single loss, when we were called to the patients within the first twenty-four hours after the attack, and with very few deaths where we were called in previously to the commencement of the fatal symptoms. My friend Dr. George William Stedman, now of St. Thomas's, and others have adopted the same treatment, and the result in their practice has been similar to that which occurred in my own cases.

In August, 1828, at a time when there was a good deal of sickness in the garrison at Trinidad, this practice was adopted in the military hospital of that island, that is to say, they bled freely, and used active purgatives in the commencement, to reduce the excitement, and afterwards the saline medicines were administered until the fever abated, and during the convalescence the quinine was given in large doses. In a communication which I received from Mr. Greatrex, of the Royals, who at that time had charge of the hospital, he states "that the above system has been applied to three hundred and forty cases or thereabouts, including both the remitting and yellow fevers, admitted into the hospital after the fever had existed, variously from six to seventy two hours antecedently to an application to the hospital, with such success, that during the last seven months not a case has died." This document is dated about seven months after the commencement of this practice. Mr. Greatrex also states, that within that time three men died having the remitting fever, but they had also abscesses in the lungs, and purulent expectoration. As these three cases were complicated with extensive organic disease in the lungs, it is probable they would have been fatal under any treatment. But out of the three hundred and forty cases of essential fever, which had been treated in the manner described, there was not one death in the Royals from the time that this practice had been adopted, and I may add, that in the West Indies, Trinidad is generally considered as one of the most sickly islands.

It can be clearly proved, that in the West India fevers, those patients that are left entirely to themselves, have a much better

chance of recovery than those who are treated with emetics, calomel or antimony, opium or acids, and that these remedies instead of being useful, add greatly to the sufferings of the patient; they decidedly increase the very evils that they are meant to relieve, and add greatly to the mortality in hot climates.

Finally, Dr. S. considers it an error to consider fever as entirely a disease of the solids—and still more so, to treat it merely with reference to the mere state of excitement. In respect to yellow fever, he thinks it can only be treated with success, when we reduce, by active measures, the increased excitement, at the commencement, and then prevent, by proper means, those chemical changes in the blood, which are in reality, the sources of the diseased action in the solids, and the true cause of the mortality in these dreadful fevers. Convinced by numerous facts, Dr. S. adopted a mode of treatment widely different from that which he had formerly employed, and, in as far as it has yet gone, the use of the Rochelle salts (tartarized soda) carbonate of soda, and other active saline medicines, at a proper period of the disease, has been attended with a train of success to which the mere Solidists can produce no parallel. He is convinced that, if this practice be generally adopted, the mortality from West India fever will be greatly lessened.

As we have no doubt that Dr. Steevens will pursue this interesting inquiry further, and lay the results of his observations before the profession in a more extended form, we shall abstain from any comments on the present occasion. We have laid a very full and faithful account of the paper before our readers, and leave them, for the present, to draw their own conclusions.

XXVI.

ON THE PRODUCTION OF WORMS IN THE HUMAN BODY. By J. SCOULER, M. D. &c. Professor of Natural History in the Andertonian University.

A very ingenious paper on the above intricate subject is published in the MAY number of the Glasgow Medical Journal, from which we are tempted to make an extract. The formation of worms in the human body is one of the most difficult problems in physiology—and is one of considerable interest even to the practical physician. We do not deem it necessary to go over the various hypotheses that have been framed, from that of equivocal generation," maintained by the ancients, down to the revival of the same hypothesis by Blumenbach, Rudolphi, and other German naturalists. It is a startling doctrine! We have the authority of Holy Writ that man himself is only a worm;—and if worms are produced by equivocal generation—or, in other words, by "fortuitous concourse of atoms," it is needless to suppose that the act of the Deity was necessary for man's first creation from the earth on which he crawls! With the hope of releasing us from this humiliating supposition, we gladly introduce to our readers the lucubrations of Dr. Scouler. After a critical analysis of the doctrines maintained by ancients and moderns on this subject, he thus develops his own ideas.

"We have now given a very brief outline of the theories by which the origin of worms had been attempted to be explained; but enough has been stated to prove that every one of them is utterly at variance with well-known facts. One theory yet remains, founded on very different principles, and which demands our most candid consideration.

Do worms originate from a spontaneous generation? Generation, or the production of a living being, consists, if we separate it from all accidental circumstances, in the separation of a portion of the parent animal, which is endowed with independent vitality. This portion is formed in the ovarium of the

female before she has any intercourse with the male, and the principal effect of the spermatic fluid is to excite the dormant powers of the germ into action, and to modify its form. This is the essence of generation properly so called; but there is another way in which animals, or parts of animals, may be produced. If we cut off the leg, or extirpate the eye, of a water newt, these parts are again restored after the interval of a few months, and only differ from those which had been destroyed in being a little smaller. The claws of lobsters and the rays of star fish are re-produced in the same manner.—In the lower animals, this process reaches its maximum of development, and becomes a new mode of continuing the species. If we cut a polype into two portions, and the circumstances be favourable, each section becomes a perfect animal. Many worms, if divided in this manner, grow under the knife, and, if abundance of food be supplied, the division may be continued ad infinitum. A very common fresh water worm, the Planaria of naturalists, if well supplied with food, exhibits this process spontaneously. The animal begins to swell, and several fissures appear on its surface, and it gradually separates into several distinct portions, each of them becoming a perfect animal. Hence generation, by means of sexes, is not necessary for the continuation of animals, and, the law of Harvey, *omne vivum ex ovo*, must be changed into *omne vivum e vivo*. This mode of reproduction is by no means rare among the simpler animals; indeed it appears to be the only one by which the infusory animalcules are propagated.

Having proved that generation, by means of two sexes, is not essential for the propagation of many animals, we are prepared to advance a step further, and maintain that entozoa may be produced by the animal which they inhabit. When we consider the extreme complexity of the organization of the more perfect animals, and vast variety of tissues which enter into the composition of their organs, we may grant that it is not impossible that the vessels which erect such delicately constituted parts may form others of far greater simplicity. Thus, in many

diseases, tumours and tubercles are formed in the organs of animals; and these new formations possess a structure as different from any of the regular tissues of the animal which produced them, as the texture of an entozoon does from that of the creature it inhabits. These tumours may be considered as possessing a degree of vitality peculiar to themselves, and only deriving their nourishment from the body to which they are attached. In the same manner, after rupture of the uterus, when, fortunately for the parent, she survives the accident, the fœtus becomes encysted, we have a phenomenon of the same kind, the fœtus retaining a portion of its vitality, and the requisite nourishment is derived from the vessels of the mother.

In the instance of tumours and tubercles, already alluded to, their origin is doubtless to be accounted for from a deranged action of the assimilatory arteries, which is of two kinds; in the first they produce a formation which is analogous to the regular structure of some other part of the body, as ossifications and steatomatous tumours. When nutrition is still more deranged, parts are formed which possess no analogue whatever in the healthy state.

Now, it is not improbable that many entozoa owe their origin to a process similar to that which we have described. Worms are always a consequence of a diseased state, and when they produce bad symptoms, it is from some accidental circumstance depending on their size, numbers, movements, or from the importance of the organ in which they are found. So that there is a diathesis peculiar to most organic diseases, there is also a verminous diathesis. In support of this, it may also be added, that worms differ from all other animals in being intimately dependant on the organization which they inhabit for the continuation of their existence; and, in this respect, the parallel between encysted worms and the encysted fœtus, already mentioned, is perfect in every point of view. As the mode of nutrition in every animal is, to a certain degree, *sui*

generis, so the worms which they produce are also peculiar.

To express clearly the manner in which worms are supposed to be formed, and to prevent mistakes, we will condense what has been said in a few words. It is not maintained that entozoa are produced from the fluids found in the intestinal tube or in the tissue of organs, but that their germs are formed by some aberration of nutrition, in a manner similar to that in which other new formations originate, and that this germ becomes endowed with an independent vitality, and is evolved into a worm.

The consideration of hydatids affords us a proof of the manner in which entozoa are formed. These cysts are of two kinds, those which are mere serous vesicles, and those which are true entozoa; but the transition, from the one to the other is very gradual. We first observe a serous cyst smooth, polished within, and containing a limpid fluid, and exteriorly fibrous. The next kind, the *Acephalocysts* of Laennec, consist of an internal fibrous capsule, containing a cyst, which is very thin and transparent, filled with a fluid, but destitute of a head or any distinct organs; these are intermediate between the cysts of the first kind and the true entozoa; so that some writers include them among the common hydatids and others among the entozoa.—We have next the *Echinococcus*, which is included in a fibrous cyst like the preceding ones, but contains in its interior many little bodies, which are acknowledged by all writers to be true worms. From these the transition is easy to be *cysticerci*, with a head like that of a tape worm, attached to a transparent cyst, included, as usual, in a fibrous one. Lastly, we have often found round worms included in such cysts. These facts afford a strong support to the theory we have adopted.

There are several objections which may be urged against this theory which it is necessary to notice. As many entozoa have distinct organs of generation, and some of them have individuals of both sexes, and possess a very complicated organization, it

has, with great propriety been urged, that there is no need for seeking any other way of accounting for their propagation than the usual one, and that it is contrary to every analogy to attribute their formation to the process we have described.

To this remark it may be replied, that it has already been demonstrated that the ova of entozoa cannot travel through the tortuous paths of the circulatory vessels; and, further, many worms, as the hydatids for example, possess no genital apparatus. Nor is it to be ascertained that, if the theory we have advanced be correct, organs of generation are of no use; for, if a worm be once formed, it then propagates its species in the usual manner. A still greater alleviation of this objection is derived from the fact, that many animals, endowed with organs of generation, are frequently propagated by a process totally distinct from it, namely, by a division of their bodies.

Another objection is, that if entozoa were produced in the manner described, we should have nothing regular and determined in their forms, but that new animals of monstrous forms and confused organization would be daily arising.

Nature, however, leaves nothing vague and undetermined in her works; and the production of entozoa is regulated by fixed and unchanging laws. The same modification in the nutrition of an organ, which produced the first intestinal worm, still continues to operate, and consequently the same animal is formed. We might as well expect to have new diseases springing up every day, and that laws, which regulate the formation of a cancer or an exostosis, should be different in every individual. Nature is always uniform in her operations, and even her most irregular productions are governed by regular laws. Even monsters, which, for a long time, were supposed to be the production of some fortuitous concurrence of circumstances, can now be classified and described, and the laws of their formation ascertained with as much precision as those which preside at the origin of a regularly organized individual.

A third objection which may be urged is, that according to this theory, if worms are produced in the manner it supposes, we should have some regular apparatus of a temporary nature, at least, set apart for their production.

We may reply to this argument, that there are many parts formed in the bodies of animals differing completely from those which are found while it is in a healthy state, and yet we see no apparatus by which they are called into being. We see no apparatus for the production of encysted tumours, or for the formation of earthy matter in the valves of the heart. In these instances, as in the origin of entozoa, we have merely to attribute all these phenomena to the aberrations of nutrition, which constitutes the essence of every disease, and the chief cause of every organic change."

We beg to return our thanks to Dr. Scouler for the pleasure which we have derived from a perusal of his interesting paper.

XXVII.

PATHOLOGY OF THE STOMACH AND INTESTINAL CANAL, &c. By J. ABERCROMBIE. M.D.*

We have already noticed two or three of the additional cases inserted by Dr. Abercrombie in the last edition of his valuable work, and we have now to throw a coup d'œil on the remainder. They are few and by no means important, being rather designed to fill up hiatus in the morbid anatomy of the organs treated of, than to afford matter for practical reflections. We will take them as they come.

CASE 1. (LV) *Fatal Peritonitis after Drinking Cold Beer, during Profuse Perspiration.*

A man, æt. 60, whilst perspiring profusely, on the 22d of June, 1829, drank two quarts of cold beer. During the following night he was attacked with severe pain and sudden

* Second Edition, enlarged, 1830.

distention of the abdomen, with noise in the right hypochondrium; vomiting was added on the 23d; no passage through the bowels could be procured, though enemata brought away bloody stools; and on the 26th he was admitted into the Edinburgh Infirmary with the symptoms of peritonitis. Every thing which Dr Duncan could do was done, but the patient sank on the following evening.

Sectio Cadaveris. "The small intestines were much distended and were filled with a fluid of a yellow colour, similar to that which had been vomited. They were externally much injected, with some adhesions. In their substance they were easily torn, giving way even when gently handled. The lower end of the ileum and the caput coli were of a deep red or port wine colour. The great intestines contained chiefly gas, and a small quantity of fluid feces, and no appearance was discovered of any contraction or obstruction, except what arose from a slight narrowing of the ileum near the ileo-colic valve. At this place there existed an ulcer, which extended quite round the circumference of its inner surface, and was about an inch in breadth. It had gangrenous edges, and the bottom of it seemed to be bounded only by the peritoneum, the mucous and muscular coats being destroyed. The man had enjoyed perfect health up to the period of this attack."

It is most probable that the inflammation of the peritoneum in this instance was consecutive to that of the mucous membrane, in the vicinity of the ileo-caecal valve. This is what we frequently observe in the progress of continued fever, and is most consistent with the nature of the exciting cause of the disease, the application of cold to the mucous surface of the stomach and intestines. Dr. Abercrombie cites it to bolster up his unfortunate theory of ileus, but we will only say that his remark, "the case can only be explained by the supposition of sudden distention and loss of muscular power," is purely hypothetical, and altogether unsupported by, indeed incapable of, proof.

CASE 2. (XII.) :—*Fatal Peritonitis from*

Perforation of the Intestine in Fever. A boy, aged 10, in February 1829, was affected with the mildest form of the epidemic fever at that time prevalent in Edinburgh. His pulse was scarcely 100; his bowels were easily regulated, and the motions quite healthy; and the abdomen was entirely free from pain, tension, or tenderness. In this favourable state of all the symptoms, he went on to the 12th day. He was then suddenly seized with most intense pain of the abdomen, with vomiting; the abdomen soon became tense, tender, and tympanitic; the pulse was rapid and feeble. I now saw him for the first time, along with Dr. Robert Hamilton. No relief was obtained from any kind of treatment; he continued in a state of extreme and continued suffering, and died in about 30 hours.

Inspection.—The peritoneal cavity was distended with air, and contained some liquid feces. There were the usual appearances of extensive but recent peritonitis. In the lower extremity of the ileum there were five or six small but well-defined ulcers, no larger than the diameter of a split-pea, one of which had perforated the intestine by a round aperture. The seat of these ulcers appeared to be in the mucous follicles, and the disease from which they arose was distinctly traced at different spots, in different periods of its progress; namely, first a firm, elevated nodule or tubercle, then a pustule, and then an ulcer.

The foregoing is a good specimen of a class of cases with which the profession are now becoming conversant. To say that they are insidious would be merely to echo a truism, but the fact is, that in some cases the symptoms are more than obscure, they are absolutely incapable of being unravelled till the sudden and terrible onset of coffee-ground vomit and abdominal pain proclaim that perforation of the gut has taken place, and that the patient's death warrant is sealed. In more than one instance we have seen the thoracic symptoms so prominent as almost to forbid suspicion with respect to the abdomen, and yet the foregoing train of symptoms have set in, the patient has rapidly sunk, and no more than the usual congest-

tion of fever has been discovered in the lungs. Practitioners will do well to bear these facts in mind, but they should also be aware that all or nearly all the symptoms of implication of the intestinal mucous membrane may exist in fever, and yet on dissection that membrane will be found to be next to healthy. We lately saw a case of this kind, in which the black tongue, stinking excretions, and other features of the case gave every reason to believe that the intestines were affected. On dissection some slight congestions and nothing more were found in the colon, but the lungs were crowded with myriads of miliary tubercles. It is curious that the lungs and the intestines should thus play into each other's hands in the progress of fever.

CASE 3. (CXXI).—*Disease of the Omentum.* "A lady, aged 60, of a full habit, had complained for some months of prominence, weight, and habitual uneasiness in the front of the abdomen. In November 1823, the complaint assumed an acute character, with severe pain, affected by respiration, and fever, but without obstruction of the bowels. The pain was increased by pressure, and a soft diffused tumour was felt to occupy the epigastric and umbilical regions, without any distention of the abdomen. The usual antiphlogistic treatment was now adopted, but with only partial and temporary benefit. After two or three weeks, the pain had become much less urgent; but she then passed into a state of low fever, with occasional delirium, and she died at the end of five weeks from the commencement of the acute attack. For the last week of her life, there was retention of urine, requiring the use of the catheter."

"*Inspection.*—The disease was found to be entirely in the omentum, which formed a thick, fleshy mass between three and four pounds in weight. It was of a dark colour and soft consistence, and no disease was detected in any other organ."

This case was communicated to our author by Dr. Storer, of Nottingham, and is an instance of what is but rarely seen, uncombined disease of the omentum. Dr. A. observes that Dr. Strambio has described

another form of omental disease in the *Annali di Medicina*. It formed an immense cerebral tumour, involving the spleen, the left kidney, the ovaria, uterus, and rectum; the symptoms were vomiting with enlargement of the abdomen and febrile paroxysms. Such cases as these are not so rare, for we have seen, and most of our brethren must have done the same, several instances of malignant disease involving the omentum with other parts. It is disease of the omentum solely which is uncommon.

CASE 4. (CXXIII).—*Very obscure and peculiar Affection, with Symptoms chiefly referable to the Bowels.* This occupies a short section of our author's work, and is not undeserving of attention. Dr. Abercrombie remarks that the affection would appear to be connected with some morbid condition of the mucous membrane of the intestinal canal, the precise nature of which eludes our observation. The patient is thin, pale, weak, with a withered look, a peculiar dry state of skin, and a small weak pulse. His appetite is variable and capricious, and he feels uncomfortable after eating; the bowels are slow, though easily regulated; and the evacuations are always of a remarkably dull colour like mahogany, or almost black. The following fatal case will illustrate the foregoing description.

"A lady, aged about thirty, had been in bad health for four or five months; and when I saw her, was wasted like a person in an advanced stage of phthisis. She had a small frequent pulse and bad appetite, but complained of nothing except some undefined uneasiness in the abdomen. The bowels were slow, requiring the constant use of medicine; the motions were consistent and formed, but always of the deep brown colour of dark mahogany or rose wood, and no treatment had any effect in correcting that colour. The abdomen was collapsed, and nothing could be discovered by examination. Sometime after I saw her, she began to have uneasiness in her chest, with slight cough; she then became liable to fits of coma, in which she lay with her eyes open, but unconscious of any thing; at length she

had repeated paroxysms of convulsion, and she died in a state of the most extreme emaciation, after an illness of eight or nine months duration.

“Inspection.”—No disease could be discovered in the brain, and the lungs were quite healthy, except some very old adhesions of the pleura. The intestinal canal was throughout so thin, as to be transparent like goldbeater’s leaf. On the mucous membrane there was in many places a tenacious mucus of a dark brown colour, but no disease could be discovered in the membrane itself, and no morbid appearance could be detected in any organ.”

Dr. A. does not attempt to explain the case, indeed the only conjecture he can offer respecting it is, that some morbid condition of the mucous membrane interfered with digestion, and prevented the nourishment of the body. Whether this be or be not the fact, we are sure that we have seen others of no very dissimilar character. We remember, for instance, a case of chronic dysentery or rather diarrhœa, for the motions were never tinged with blood, which obstinately resisted every kind of remedy, and on dissection no disease of the least consequence could be discovered in the body. In another instance of vomiting, fetid evacuations, and extreme emaciation, dissection after death revealed no morbid appearances of any moment. Those who have seen much of morbid anatomy will acknowledge that such cases are not of the rarest, and they offer a humiliating commentary on the imperfection of our art, as well as on the extravagant fanaticism of the ultra apostles, of what we may term *sectio-cadaverism*.

“I have seen some other cases which showed similar characters, and proved very tedious and unmanageable. The peculiar character in all of them was the remarkably dark colour of the evacuations, which nothing had any effect in correcting. The last case that occurred to me seemed to derive most benefit from the sulphate of iron; and this remedy, which in general makes the evacuations very dark or nearly black, made them in this case decidedly lighter than their usual colour. Another seemed to derive

benefit from small quantities of mercury. The patients had in general a peculiar emaciated withered aspect, with a dry state of the skin, a weak pulse, and a variable and capricious appetite; but no actual disease could be discovered capable of accounting for their unhealthy appearance.”

CASE 5. (CXVI.) :—*Ileo-vesical Communication, from the Metastasis of Rheumatic Inflammation.* A lady, æt. 63, was seized, June 1823, with rheumatic symptoms accompanied by an erythematous blush on the ankles. In eight or ten days these symptoms disappeared rather suddenly, and dysuria with much uneasiness in the region of the bladder supervened. Next day, July 9th, there was complete retention of urine, pain and distention of the abdomen, continued vomiting, rapid feeble pulse, and cold skin. On the 10th the vomiting subsided, but the retention continued, and much bloody urine was regularly drawn off by the catheter. This state of the urine ceased in eight or ten days, and it then became highly offensive, depositing pus and slough, and on several occasions a quantity of fetid gas escaped through the catheter. The abdomen continued distended, the motions were liquid and offensive, and on the 29th she died.

Sectio Cadaveris. “The omentum adhered to the bladder and to the ascending colon. The caput coli was greatly enlarged, and the extremity of the ileum adhered to the posterior part of the bladder. The bladder adhered extensively to all the parts within the pelvis, and in attempting to separate it, a large quantity of pus escaped. Its inner surface was sloughy, and shreds of its mucous coat were hanging into its cavity. An opening capable of transmitting a goose quill was found to exist betwixt the bladder and the portion of ileum which adhered to it. The left kidney was healthy; the right was wasted, so as to leave only the calyces and cellular texture without any of the glandular structure.”

CASE 6. (CXVII.) :—*Frangus Hæmatodes of the Liver ulcerating into the Stomach.* A woman, æt. 30, was affected with cough, copious

expectoration of viscid mucus, night-sweats, and great prostration of strength. In Nov. 1824, she was seized with vomiting of dark matter resembling venous blood partially decomposed, and she discharged large quantities of the same by stool. A hard moveable tumour was felt in the epigastrium, which was painful on pressure. Her strength now sank rapidly, and she died on the 3d of December, the vomiting having ceased several days before her death, but the cough continuing severe, the bowels being obstinate, and the motions as before.

Section Cadaveris. "The tumour that had been felt in the epigastrium was found to be a tubercle, the size of an egg, attached to the left lobe of the liver. It adhered firmly to the stomach, near the pylorus; and on the internal surface of the stomach, at the place of the adhesion, there was an ulcer the size of a shilling; this ulcer appeared to have been the source of the black discharge, a considerable quantity of which was still found in the stomach and intestines. The coats of the stomach, along nearly the whole of the smaller arch, were much thickened and indurated, and the pylorus was considerably contracted in its aperture. The tubercle presented, when cut into, a variegated texture, partly a firm white tubercular matter, and partly a reddish substance resembling the structure of the liver; but the white matter was the more abundant.—There were four or five similar tumours, the size of walnuts, in various parts of the liver. The left extremity of the pancreas was of a soft cheesy consistence, and adhered to the stomach. The other abdominal viscera were healthy. After the most careful examination, no disease could be discovered in the viscera of the thorax, except a few slight adhesions between the pleura costalis and pulmonalis, which were evidently of long standing.

The above is related as an instance of "tubercular disease" of the liver; it was evidently fungus hæmatodes. We lately saw a case of fungus hæmatodes of the stomach in which the coats of the organ at the pyloric extremity and along the lesser curvature were perforated by ulceration, whilst the cavity of the stomach communica-

ted with that of an abscess situated between it and the liver. In this case the symptoms were so obscure as scarcely to direct suspicion to the affected organ.

CASE 7. (CL.):—*Fatal Hæmorrhage from the Spleen.* "A woman, aged 20, was admitted into the Infirmary of Edinburgh, on 16th June, 1829, under the care of Dr. Duncan. Her complaints were chiefly of a rheumatic character, with considerable nausea, some fever, anxiety, and restlessness.—She stated, that, a fortnight before, she had been suddenly seized with severe pain in the stomach, followed by nausea and vomiting, and that these symptoms continued to recur at intervals for a week. On the 17th, there was vomiting, with much anxiety and restlessness, and she complained of pain on pressure in the left side beneath the false ribs. On the 18th, she became low and cold, and died in the evening.

Inspection. A quantity of coagulated blood was found in the cavity of the abdomen, which was ascertained to have proceeded from a laceration of the spleen.—That organ was of a paler colour than natural, and its substance was soft and easily torn. There was a sacculated disease of the right ovary; but no other appearance of recent disease could be detected in any organ."

Such cases as the foregoing are uncommon but not unique. Dr. Abercrombie refers to one mentioned by Fournier, in which a man who had suffered for some months from quartan ague died suddenly, when convalescent, after a hearty supper.—The spleen was found enlarged and ruptured, and there was much coagulated blood in the cavity of the abdomen. Within this last fortnight we have heard of a similar case in this metropolis. The patient died after a short illness, and the cause was supposed to be internal hæmorrhage of some kind or other. On dissection the spleen was found to have been ruptured and the blood to have escaped into the peritoneal cavity. Of the history of the case we know nothing, as we only heard of it indirectly.

CASE 8. (CL.):—*Enlargement and mixed State of Disease of the Pancreas.*

"A lady, aged about 40, came to Edinburgh in May, 1829, affected with very deep jaundice, which was of several months standing. There was occasional uneasiness in the abdomen, but it was not severe; and the general health was little impaired. No disease could be discovered in the region of the liver: in the centre of the abdomen, near the umbilicus, there was a slight feeling of knotty irregularity, but it was obscure, and could only be felt occasionally.—I saw her along with Dr. Macwhirter, and a great variety of treatment was adopted without benefit. She at length became dropsical, and returned to the country, where she died, gradually exhausted, in August.—I am indebted to Mr. Syme of Kilmarnock, for the account of the morbid appearances.

"*Inspection.* There was a gallon of fluid in the abdominal cavity. The gall bladder was very large, and was distended with very black bile. The liver was of a deeper colour than natural, but otherwise sound.—The whole of the peritonæum was somewhat thickened. The pancreas was enlarged to the size of two fists, and embraced the ductus communis so firmly, that it was found impossible to pass a probe from the gall bladder into the intestine. It was of a nux texture, some portions being soft, resembling the medullary sarcoma, and others of scirrhus hardness. The other viscera were healthy."

This completes the set of cases appended to the last edition of Dr. Abercrombie's work, and concludes likewise our brief sketch. We have already expressed a very favourable opinion of the volume, and it would almost be superfluous to say, that we recommend it to all branches, and each member of the profession.

XXVIII.

STRICTURE OF THE SIGMOID FLEXURE OF THE COLON.*

Dr. Burne, of this metropolis, has published two interesting cases of contraction of the

colon in our esteemed provincial contemporary. This class of affections is not sufficiently rare to be a matter of curiosity, but common enough to be one of practical interest.

Case 1. A gentleman, between 45 and 50 years of age, of sanguine temperament and a free liver, consulted Dr. Burne in February, 1826, on account of troublesome superficial ulcerations in the mouth, heat and dryness in the mouth and pharynx, and some little trouble in deglutition.—He was feverish, but the bowels were habitually regular. Our author intimated to his patient a fear of incipient stricture of the œsophagus, and prescribed leeches and saline aperients, under the use of which the ulcers soon healed. In November, and again in February, 1827, the patient applied to Dr. B. for dyspeptic symptoms, after which he saw no more of him until February, 1828, when he still suffered from the dyspepsia with the addition of a sluggish state of bowels. In July, 1828, he returned with an aggravation of the complaint, and was troubled much with fulness when the bowels were not freely moved, which was now effected with more difficulty. The Cheltenham waters were tried, with great but temporary benefit, for after he left the place, the irregularity of the bowels and dyspepsia were re-established, and his age and sallow face excited an apprehension of organic disease. A consultation was proposed and Dr. Armstrong was called in, but nothing conclusive was elicited. The costiveness continuing, Dr. Burne determined to ascertain by manual examination, if any cause of obstruction existed in the rectum. On passing the finger forward as far as was practicable, he met with a hard immoveable tumour, the size of an egg, and still further backwards and upwards the tip of the finger reached a contraction of the bowel, not larger in diameter than a swan quill, surrounded by a hard knotty structure, which altogether resembled a scirrhus os uteri. The opinion of the late Mr. Wadd was now taken on the propriety of using bougies; he decided against them. Severe spasmodic contractions of the bowels succeeded, the

* Midland Reporter, No. VIII. May, 1830.

exhibition of castor oil, and these again were followed by a sharp attack of inflammation, through which the patient with difficulty struggled. Mr. Copeland, Mr. Brodie, and Sir Astley Cooper were consulted, but all ultimately agreed on the hopelessness of the case, and the inexpediency of surgical interference. The patient lingered on, scarcely ever passing any feculent matter, and suffering from occasional attacks of violent spasm and succeeding inflammation till the 20th of February, 1829, on which day the spasms were followed by sudden pain in the left side of the belly, compared to the discharge of a pistol. The abdomen immediately became tense, the powers sank, and in eleven hours the unfortunate patient expired.

Secitio Cadaveris. "The abdomen being opened, a large quantity of feculent matter, of soft consistence, was seen lying among the intestines and upon the mesentery, and was found to proceed from a transverse rupture of the colon, about an inch long, at the spot from whence the violent pain darted. The whole of the colon was filled with feculent matter of the same kind; the sigmoid flexure was seen stretching across the brim of the pelvis to the right side, when it turned quickly upon itself and terminated in the diseased portion, which was situated directly under the promontory of the sacrum. The diseased part was about the size of an egg, and consisted of a scirrhus degeneration of those strictures of the intestine situated between the mucous and peritoneal coats. The aperture of communication between the colon and the rectum through the diseased part, scarcely equalled the size of a swan quill, and had a curved direction, which proved the correctness of the opinion, that force used in attempts to pass a bougie would be likely to rupture the bowel. The lower opening looked backwards and downwards to the hollow of the sacrum, and its margin was knotted and irregular as has been described. There were adhesions of the sigmoid flexure to the small intestines, and the scirrhus mass was adherent to the sacrum."

Case 2. A female pauper in Covent Garden Workhouse had been admitted, three weeks before her death, in a state of extreme emaciation and with a remarkably distended abdomen; she passed scarcely any feculent matter during the three weeks and was constantly vomiting, so that nothing except brandy and water could be retained upon the stomach. This is all the account of the case that Dr. Burne could procure.

Secitio Cadaveris. "Before the abdomen was opened, traces of the convolutions of the intestines were evident, by corresponding elevations of the integuments: these convolutions were found to be distended with gas, and the colon was full throughout of soft feculent matter; and at the termination of the sigmoid flexure in the rectum, was a circular contraction of the bowel forming the annular stricture. There was no thickening or disease about the part, and the contraction had the appearance of the bowel tied with a ligature, except that there were neither folds nor puckering."

Many interesting observations on the foregoing cases, and on stricture of the colon generally, are made by Dr. Burne. He particularly remarks the soft consistence of the feculent matter, a circumstance which does not appear to have been noticed by systematic writers, but which he believes to be generally present in cases of this disease. Our author looks on it as a special provision of Nature, but we must be excused if we doubt the correctness of his opinion, and hesitate to attribute such an office to the vis medicatrix naturæ. Dr. Burne appears to regret that, in the first case, no attempt was made to establish an artificial anus. We cannot share in his concern, but agree with the late Mr. Wadd, who opposed the proposition. Setting aside the dangers and difficulties of the operation, neither of them inconsiderable, where would have been the service of joining a most loathsome to an incurable disease, of superadding disgust to commiseration in the minds of the patient's family and friends? The following remarks on purgative medicines are judicious.

"All are agreed that the aperients which

must be necessarily given, should be of a mild character, and the recommendations of authors who have treated on the subject, are limited to castor oil, senna, and sulphur; thus leaving unnoticed saline aperients, which, as will presently be seen, are the most efficacious. These medicines, castor oil, senna and sulphur, although desirable from their mild qualities, are very uncertain and ineffectual in cases of stricture: it is true they promote a moderate, and so far, a proper peristaltic action of the intestines, but as they do not render the fæces watery, this action is not followed by sufficient evacuation, and therefore not by sufficient relief. Sulphur is objectionable on other grounds; it has been known to form into balls when taken in large doses, and in this way may add to the mischief. The same objection applies also to magnesia, which has been found accumulated in a large quantity above the stricture.

"While the subject of the first case was at Cheltenham and taking the waters, the evacuations were so thin that the colon emptied itself effectually every day, and under these favourable circumstances the patient lost all complaint and improved surprisingly. This first suggested to me the use of saline aperients, which were given in the form of Seidlitz powders and of sulphate of magnesia, in a very diluted solution; and they were found to operate much more pleasantly and efficiently than other aperients. These, however, and the Cheltenham water itself drunk in town, were by no means so certain in their operation as the waters drunk at Cheltenham, owing, no doubt, to the want of auxiliary circumstances which are known to favour the operation of mineral waters, as change of scene, absence from the fatigue and anxiety of business, early rising, and exercise. On one occasion, when castor oil was substituted for salts, its effect was exceedingly injurious; it duly excited the action of the intestines, but as it did not render the fæces watery, they could not pass the stricture freely, and the consequence was violent spasmodic pain and vomiting.

"Drastic and heating purgatives are very

properly objected to in all cases of stricture; nevertheless, the distress of the patient on one occasion was so great for the want of evacuations, that a person of very great practical attainments was induced to propose the administrations of croton oil, the propriety of which was much discussed, on account of its irritating properties and violent action; but its employment being much urged by the proposer on the score of its unrivalled purgative power in other cases, it was exhibited in the dose of one drop, which was repeated in the space of half an hour. The effect, as was anticipated, was nearly fatal; it produced most violent contraction of the intestines, and spasmodic pains, with a distressing heat along the whole alimentary canal, and constant and urgent, but ineffectual efforts to go to stool, the scanty evacuation consisting of nothing more than a bloody secretion from the rectum, the product of excessive irritation. The violent action of the intestines led one to fear a rupture of the colon, of which the sequel of the case proved there was great danger.

"In the medical treatment of stricture of the large intestine, then, saline aperients are the best and most efficacious; and where the disease does not admit of relief by surgical interference, the physician would best consult the interest of his patient, by urging him to reside at Cheltenham or Leamington, and by the aid of warm bathing and of drinking the waters regularly, to avail himself of the means which will most certainly mitigate his sufferings and prolong his life."

XXIX.

DR. SMITH ON FEVER.

In a long course of Journalism we do not remember to have received more than half a dozen formal "RECLAMATIONS" from the various authors whose works have been reviewed, although we freely opened an EXTRA LIMITES department for that especial purpose. We believe that few journalists could make the same remark; and we take some credit to ourselves for having steered a course

so generally free from recrimination. We willingly give insertion to the following letter from Dr. Smith; and shall not accompany it by any comments.

TO THE EDITOR OF THE MEDICO-CHIRURGICAL REVIEW.

Dear Sir,

Perhaps you will allow me to correct a mistake into which you have inadvertently fallen in the concluding part of your review of my work on Fever, in commenting on the case of Dr. Dill. The mistake relates to the period of the disease at which you were called to see our mutual friend. You did not, if you remember, visit him "in the midst of the active discipline" to which he was subjected, but at the close of it; the case at the period you saw him, as you intimate, admitted of no further depletion, and no more blood was taken after that time, until he relapsed at Brighton. It is scarcely necessary to add, that the statement at the foot-note of my Treatise of the total quantity of blood abstracted (120 pounds) is a misprint for 120 ounces.

The detail of the early symptoms of this case is given at page 109 of the Treatise, while the account of the treatment is postponed to page 398, and, for the sake of brevity, the symptoms were not again recounted; but I must have been wrong in separating, at so great a distance, the symptoms from the treatment, since it has been the means of leading so acute a reader into a misconception of the stage of the disease to which the active treatment was confined.

The same reason, I hope, will account for your having thought that I could scarcely foresee, at the period at which I first abstracted blood, the severe fever that was at hand: but, if you will take the trouble to turn to page 109, you will perceive that, on the afternoon of the first day of the disease, there was present an assemblage of symptoms which clearly indicated the approach of a high degree of cerebral affection, and that accordingly, on the morning of the second day, the symptoms of intense disease of the brain were urgent: these, though occasionally mitigated, remained unsubdued

through the third and the fourth days, and required the copious depletion that was resorted to; but, on the evening of the fourth or the morning of the fifth day, when you first saw Dr. Dill, they were overcome; and from that period no active remedy, excepting the cold dash was employed. The patient was convalescent and sitting up in bed on the 8th or 9th day of the disease, a most remarkable occurrence after such an attack, and one which certainly would not have been witnessed had the malady been allowed to produce organic change in the brain, or had the means employed to prevent this result been pushed either beyond the strength of the disease or that of the patient.

Permit me to add, that this form of fever is not, I apprehend, generally understood; and yet the life of the patient depends upon its being discriminated at the very onset of the attack; the postponement of the proper remedies, for the space of a few hours, will make all the difference between life and death. In the commencement of fever, a slow and oppressed pulse, or a slow and intermittent pulse, accompanied with suspirious respiration, or respiration interrupted with frequent sighing, denotes one form of the acutest cerebral disease ever witnessed in the fevers of this country. If, in such cases, copious bleeding be not employed on the first or second day, the patient will generally be in a state of hopeless typhus on the fourth or fifth. In the convalescent stage of fever, on the contrary, a slow and intermittent pulse affords the most favourable omen: and it is one of frequent occurrence. As I had not seen it noticed in any book, nor heard it spoken of by any physician, I was at first not without apprehension for the fate of the patients in whom it occurred, although I could perceive no unfavourable symptom accompanying it. But I soon observed that it was the sure sign of a safe and steady convalescence. Of all the relapses that I have witnessed, I do not remember one in which this state of the pulse existed. It is not a little remarkable, that the same external sign thus indicates two such opposite states of the system, as that present at the commencement and at the termination

of fever, and should afford two such opposite prognostics. I have to regret that my endeavour to enable my readers to distinguish and to contrast these opposite states, in order to prevent groundless apprehension in the last case, and to create immediate alarm in the first, has been attended, in one instance at least, with little success; for one of your contemporaries, after citing my statement, that at the termination of fever a slow and intermittent pulse is a sign of a sure and steady convalescence, observes—"we must pause here, and remark that an intermittent and slow pulse has been long looked on as a very unfavourable symptom in fever, and so the author admits in a subsequent page—an oversight for which we cannot account."*

Out of the last 300 patients admitted into the London Fever Hospital, I have examined the number not bled, the number bled, the number of ounces of blood abstracted from the whole, the mean quantity taken from each, and the duration of the fever and the event in both sets of cases: the result is curious and instructive. Out of these 300 patients 158 were not bled; 11 were cupped; 131 were bled from the arm; while, in all, leeches were occasionally applied, but these have not been taken into the account. Of the 158 that were not bled there died 38, or one in four. Of those who recovered, there were dismissed from the hospital, after having been under treatment in the house one week, 21—two weeks, 50—3 weeks, 38, and four weeks and longer 49. From the 11 that were cupped, the total quantity of blood abstracted was 138 ounces or $12\frac{1}{2}$ ounces for each; of these patients five died, or nearly one half. From the 131 that were bled from the arm, the total quantity of blood taken was 2557 ounces, or from 19 to 20 ounces from each: of these there occurred 12 deaths, or one in 11 nearly. Of those that recovered, there were dismissed from the hospital in the first week 12—in the second week 40—in the third week, 41—in the fourth week or later 38.

* London Med. and Surg. Journal, Feb. page 114.

The proportion of deaths in the list of those not bled, and of those cupped, is without doubt increased, by its containing those who were received into the hospital at too late a period of the disease to admit of general bleeding; but, on the other hand, the proportion of recoveries, and the rapidity of recovery, are augmented by its containing those in whom the disease was so mild, as to require neither bleeding nor any active remedy; while the 131 that were bled offered a fair average of the state of fever, as it occurs for treatment to the physician in ordinary practice, but not as it occurs to the general practitioner, who, in consequence of seeing his patients at a much earlier period of the disease than the physician, can abstract blood with incomparably greater advantage. Were this truth duly impressed upon the mind of this part of the profession, and could they be induced, during the first, second, and third days of the disease, to use the lancet with cautious boldness until the pain of the head is subdued—the mortality of fever would be diminished at least one half, and its duration a week or a fortnight.

I am, Sir,

Yours, very truly,

SOUTHWOOD SMITH:

36 New Broad-st.

May, 1830.

XXX.

ROYAL COLLEGE OF SURGEONS.

MR. GUTHRIE completed his Surgical Lectures at the College on Saturday, the 15th instant. Having noticed the injuries of the head, of the chest, and the diseases of the urethra; on the last day, he shewed the instrument used for breaking a stone in the bladder, with an improvement which, he said, was of the utmost importance, rendering it a perfectly safe instrument, which it was not before. It could now be taken to pieces in the bladder, and each piece might be drawn out separately, so that no accident could now arise, capable of preventing its withdrawal. He stated that he was led to

make this improvement, with the assistance of Mr. Weiss, (to whose ingenuity he was much indebted), in consequence of having used the instrument near five years ago, on which occasion it became clogged and could not for a long time be cleared so as to be withdrawn. The patient would not admit of its re-introduction, and was cured by the common operation, which he performed a

week afterwards. He had been assured that in two instances in France an accident of this kind had happened;—the instrument could not be withdrawn, and the patients died. He therefore considered an improvement which obviated this difficulty as one of the greatest importance, as regarded the safe application of the instrument.

CLINICAL REVIEW.

XXXI.

GLASGOW ROYAL INFIRMARY.

INJURIES OF THE HEAD.*

DR. AUCHINCLOSS has published a quarterly report of the cases under his care at the above institution, with the clinical remarks which they elicited, in the last number of our valuable cotemporary of Glasgow. From the many interesting cases in which the report abounds we shall select the subject of injuries of the head for the present article. It is a subject which is far from exhausted, although so much has been written on it at various times by some of the ablest surgeons that have adorned the profession in this country. The truth is, that cases of injury of the head are almost infinitely varied, and nothing but immense experience, or a long and careful collation of really *authentic* facts can ever lead to an extended and satisfactory acquaintance with the general bearings and more particular details of this class of accidents. We would recommend gentlemen to peruse the paper of Mr. Brodie in a late number of the *Medico-Chirurgical Transactions*. It is one of unassuming but genuine merit, and it is no small recommendation to the surgical reader, that he may rely implicitly on the facts and the statements it contains. This is unfortunately not the case with some of the more showy and tinselled productions of the day. With these few observations we pass to the report before us.

CASE 1. *Concussion—Symptoms of partial Pressure.* "James Armour, aged 27, a quarrier—admitted 8th May. The accident had happened a week previously, and was occasioned by a quantity of earth falling upon him. He remained insensible for two hours, during which considerable hæmorrhage is said to have taken place from the right ear. On recovering, he felt acute pain on the right side of the head, for which he was twice bled with marked relief. On admission, he had little or no uneasiness, and complained chiefly of giddiness when he attempted to raise his head from the pillow. He was perfectly blind of the left eye, the pupil of which, however, contracted freely on exposure to light. The sense of hearing of the right ear was much impaired. His mouth was slightly drawn to the left side, which deformity increased greatly when he spoke. The pulse was about 60, the skin cool, and in other respects he was under no fever. The bowels were freely opened, and, on the following day, a large blister was applied to the head. On the 13th, four days after admission, there was an accession of feverish symptoms, with return of headache and deep-seated pain under the right ear, the hearing of which was completely gone. The pulse was full and had risen to 90. He was bled from the arm, and the blistered surface was ordered to be dressed with savine ointment. On the 14th, the pain of the head and ear had all but gone, and in every other respect he felt greatly better. The features were much less distorted, and he had recovered in part the hearing of the

* Glasgow Journal, No. X.

right ear. The pulse had fallen to 70. The blister was repeated to the head, and he was ordered gr. ii. calomel three times a day. In the course of a week his mouth became affected, and the medicine was therefore omitted. He continued daily to improve, and was dismissed well on the 8th June, having been a patient in the hospital exactly a month. At this date the features did not appear at all to be distorted, except when he laughed or attempted to smile. He did not recover the sight of the right eye."

The case is not drawn up with much care, for in one place it is said that the vision of the *right* eye was destroyed, and in another, of the *left*. Such carelessnesses as these are always reprehensible. Dr. Auchincloss observes, and every experienced surgeon will agree with him, that the case was evidently one of concussion with partial pressure from extravasation. The recovery from the state of insensibility and the continuance of partial palsy of the face with hæmorrhage from the ear are sufficient evidence on these points.

"This person was not admitted till after the eighth day, by which time the inflammatory stage subsequent to the accident, had subsided under the usual means. The principle observed in the treatment was to excite absorption, if the symptoms depended on effusion, or, supposing these to be the consequence of concussion, to rouse the tone of the nerves. Both ends, probably, were accomplished by the measures had recourse to;—namely, counter-irritation, and the exhibition of mercury.

"On the fourth day from admission, there was a return of feverish symptoms, with pain in the situation of the ear, which readily yielded to a full bleeding. This perhaps depended on an inflammatory state of the brain, excited by the effused blood. In cases of effusion into the substance or on the surface of the brain, we often meet with accessions of inflammation, occurring in the progress of its absorption. In this respect, the presence of the fluid seems to act merely as a cause of irritation, and may therefore be compared in its operation to that of an exostosis, or any other tumour, in producing fits of apoplexy, &c.

"One other circumstance in this case rather uncommon, may be mentioned, viz.—that the motions of the iris of the blind eye remained perfectly free. From this it is evident that the mobility or immobility of the iris, is by no means an index of the sensibility of the retina, at all to be depended on. This is owing to the iris being supplied by the ciliary nerves, which proceed from the lenticular ganglion. I have frequently met with cases of amaurosis with active pupils, and *vice versa*,—an immovable state of the pupil with perfect sensibility of the retina."

CASE 2. *Concussion—Slight Compression—Secondary Symptoms.* James Gorman, æt. 30, admitted June 4th, in a state of insensibility, with abrasion of the left cheek and dislocation of the left thumb. When placed in bed he lay in a semi-comatose condition, returning no answer when loudly questioned, moaning frequently, and restlessly tossing his limbs when pinched. Pulse 120, sharp; respiration slow; skin hot and dry. On the day preceding his admission he had leapt from the roof of a one-story house, whilst intoxicated, and pitched upon his head. *Venesection to twenty ounces—sixteen leeches to the head, with cold lotions—purge of calomel and senna draught.* The bleeding was repeated on the 5th, and on the 6th he was more composed, had a pulse at 90, and put out his tongue when requested; the pupils, especially the right, were dilated. On the 8th he was quite sensible, but complained of slight headache; pulse 70; tongue clean and moist. That night was restless, and on the 9th had a vacant expression of countenance, with stupidity in answering questions. *Blister to the head.* In the night he was so delirious as to require a strait-jacket, but it was delirium without pyrexia. *Blistered surface dressed with savine—calomel gr. ij. 3tius horis—low diet.* The mouth became "smartly sore," the patient got daily better, and was dismissed cured on the 1st July.

In a fortnight he was re-admitted with vertigo, double vision on walking, and occasional pain shooting through the head.—*Cupped on the nucha, blistered and ordered*

calomel pill thrice daily. In five days the mouth became affected and all the symptoms were much relieved. On the 29th the medicine was re-commenced, and a caustic issue established in the neck: violent pyæmia ensued, the symptoms wholly disappeared, and the patient was again dismissed on the 10th of August. On the 23d he was again received with nearly the same symptoms as before, but little or no pain in the head. The issue was re-opened, the mercury repeated, and a strong liniment applied to the head. The mouth becoming affected, the symptoms "began to wear off;" the mercury was repeated, and the patient left the hospital on the 15th September. He shewed himself again in February on his return from Ireland, and stated that he continued to enjoy good health.

This is an interesting case, and in all probability slight extravasation or even laceration of the brain was joined with the concussion. The occurrence of what we have termed "secondary symptoms," and their *apparent* subjection to mercury, are not amongst the least important features. We say *apparent* subjection to the influence of calomel, for the evidence of its powers is not quite positive in the written details of the case. Let us hear the opinions of Dr. Auchincloss.

"The treatment was very simple. The man had suffered a severe mechanical shock, to which inflammation, as a necessary consequence, had succeeded. The chief indication then was to subdue arterial action. This was effected by bloodletting in sufficient quantities to control the force of the circulation, the advantages of which were strikingly apparent. Although rather a tedious case, it was otherwise very interesting. The frequent return of vertigo, double vision, &c. proves to me that it was in every likelihood complicated from the commencement with partial laceration of the brain, and slight extravasation of blood; or that perhaps effusion of serous fluid had happened after the cessation of the inflammation. I should imagine it more likely to have been caused by the first. One or other of these circumstances, however, suffi-

ciently explains the loss of memory, giddiness, double vision, &c. We often find similar effects to supervene on the cure of phrenitis, or in cases of fever where there has been a great flow of blood to the head, and more particularly in injuries of the head with decided extravasation of blood.

"For the removal of those symptoms, the treatment consisted in obviating, in the first instance, the chance of the recurrence of inflammation, and afterwards in favouring absorption by counter-irritation. The former was accomplished by cupping and the use of purgatives; and the latter by the repeated application of blisters, and the formation of a caustic issue. After a sufficient trial, these were found to be perfectly ineffectual. Mercury as an ulterior measure was therefore had recourse to, and used frequently and repeatedly with the best effect.

"As soon as the mouth got fairly under the influence of the medicine, the unfavourable symptoms uniformly began to subside. Their frequent recurrence convinces me that the brain perhaps may have been slightly lacerated, giving rise to partial effusion of blood, either at the time of the accident, or at a period subsequently to it. Instances of secondary hæmorrhage are certainly rare, though several are on record.—The same line of treatment is applicable to both cases."

CASE 3. Concussion—Scalp Wound—Secondary Symptoms. John Curbans, æt. 21, a slater, admitted Sept. 8th, with a wound an inch long through the integuments of the right eye-brow, and another over the right temple where the bone was exposed, and the probe could be passed for three inches upwards and backwards. He had little head-ache, but chiefly complained of a fixed pain in the hypogastrium with inability to make water, and a quick pulse. He had fallen from a scaffold two stories high on the preceding day, struck his head in the descent against the edge of a wall, and received a quantity of slates upon his back. *Catheterism—edges of wound brought together by plaster—fomentations to the belly—castor oil.* The fever being increased next day, he was bled

to xvi. ozs. and had twelve leeches to the belly with relief. The bleeding was repeated on the 10th, and saline mixture ordered, but on the 12th there was a recurrence of pain in the belly with increase of pyrexia, for which he was cupped on the loins to 12 ozs. From this time he no longer required the catheter. On the 21st he had a rigor, the wound looked pale, and the discharge which had previously been healthy was scanty and thin, he had malaise and tightness about the head, the countenance was flushed, and the pulse 112. *Bled from temporal artery—blister to nape of neck—castor oil—cal. gr. ij ter die.* He was immediately relieved by the bleeding, and on the 22d had no pain of head. *Calomel continued—blistered surface dressed with resin ointment.* On the 26th, the mouth was sore, and the calomel discontinued; he felt well, and the discharge was good.

On the forenoon of the 27th he had another rigor, and the wound above the temple had a glazed appearance with copious discharge of brown serous fluid. On introducing the probe it passed nearly four inches backward to an elastic fluctuation swelling; this was immediately laid open to the extent of two inches and a half, exposing a considerable surface of the bone bare and rough. Eight ounces of blood were lost with relief to the pain in the head; pulse 116, sharp—countenance flushed—tongue clean—mouth nearly free from mercurial fetor. *Dose of physic—blister to the head.* On the 28th he was bled to ten ounces, and the calomel recommenced every three hours. On the 30th the pain of the head was gone, the pulse was 84, calm, the wound clean, the mouth slightly touched. Ptyalism took place, the mercury was omitted on the 3d October, the wound gradulated and healed, on the 26th the patient was dismissed, and he has remained quite well to the present time.

The issue of this case is extremely favourable in comparison with what frequently follows the development of the symptoms it presented. Rigors on the 14th and subsequent days, are but too often the overture to the fatal drama of pus on the meninges of the brain, or purulent depots in the liver

or cellular membrane. Calomel was used in this, as the preceding case, with a boldness not commonly evinced in the treatment of these cases. It will require further experience to determine its merits or demerits. Dr. Auchincloss' clinical remarks are brief and to the purpose.

"The preceding is an instance of concussion both of the spine and brain. Although the fall seemed to have been very severe, yet he suffered but momentary stupor, followed by vomiting. Symptoms of cerebral disturbance did not evince themselves till 14 days subsequent to the accident.

"These, as also the unfavourable symptoms which took place on the 27th, when he had a relapse, were ushered in, as is usually the case after injuries of the head, by a rigor, with a glazed, unhealthy appearance of the wound. When admitted he was free from fever, the local symptoms being pain at the lower part of the back, and in the hypogastrium. There was also retention of urine, with paralysis of sphincter ani. These subsided after free depletion, both general and local, fomentations, purgatives, and the use of the catheter. Palsy of the bladder is a common effect of injuries of the back, but, in this instance, it seemed to be accompanied by actual inflammation of that organ, or of parts in the immediate vicinity. The treatment at first had recourse to was, doubtless, beneficial in lessening the tendency to inflammation of the brain, having lost during that period upwards of forty ounces of blood, so that he was very much reduced by the time the bad symptoms appeared.

"The utility of mercury after bloodletting was well marked in this case. The unpleasant symptoms disappeared, almost immediately, on the mouth becoming decidedly upder the influence of that medicine. At both relapses venesection was not sufficient to remove the pain, &c. Mercury, therefore, may be considered as one of the best auxiliaries to bleeding in the treatment of such cases. To ensure its full effect, however, I am persuaded that the medicine ought to be carried to the extent of producing smart ptyalism, as is so beautifully exemplified in the cure of iritis, and of some of the other disorganizing inflammations of the

eyeball. In addition to its other effects of exciting absorption, &c. it may not improperly be said to act beneficially, partly, as a counter-irritant.

"The opinion was long entertained that a bone, when deprived of its periosteal covering, must necessarily exfoliate. The contrary, as I have often witnessed on other occasions, was seen to take place. The surface of the bone granulated, and in process of cure these granulations readily inosculated with those from the surrounding soft parts."

CASE 4. Slight Concussion—Simple Fracture of the Cranium—Severe pain in the Head.
 "George McDonald, aged 40, was admitted 27th Feb. under the care of my predecessor, Dr. Couper. On the 2d January preceding, when intoxicated, he had fallen down a stair, and pitched on his head. He remained insensible for 10 minutes after the accident. With the exception of a slight abrasion of the left cheek, there was elsewhere no mark of injury to be seen. He continued at his employment during the first week. He had then a rigor, was sick and drowsy, and affected with severe shooting pain in the forehead and across the temples. At length a small puffy tumour appeared over the upper part of the left parietal bone. This, having extended, was opened a few days previous to admission, and a quantity of matter discharged. In this situation, the bone was found broken into several small pieces, and slightly depressed. The integuments were undermined, and the probe grated on rough bone to the extent of two inches around the opening. There was no paralysis, and he seemed perfectly intelligent. Pulse 80. Bowels slow. He was bled from the arm, had leeches applied to the head, and was purged with decided relief. The headach again became severe on the 4th March, when leeches were repeated. He remained in the hospital till the 21st April, during which period he was never free of head-ach. The treatment had recourse to was the application of leeches and cold lotions to the head, the occasional use of purgatives, and an alterative course of mercury. On his leaving the hospital, the following report is

entered in the Journal: 'Has little pain in the head, and otherwise appears in good health. No portion of the denuded and depressed bone has yet come away.'

"This person was re-admitted on the 16th May. The head-ach, which had been more or less constant from the time he left the hospital, was now particularly severe. There was no other bad symptom. He was addicted to dissipated habits, and had been living rather irregularly. The sore on the upper part of the skull was about the size of a sixpence. The surrounding scalp was quite adherent. The depressed bone felt rough, and was covered with flabby granulations. The treatment consisted in the application of blisters and the use of mercury to pytalism. He left the hospital on the 11th June, still affected with headach, though much less severe. No change had taken place on the sore.

"He was again admitted on the 4th July, and in the interval had been living very abstemiously. The pain was constant and so severe, that he could neither walk nor stoop. He complained of loss of memory. A caustic issue was inserted in the nape of the neck;—and the edges of the sore on the head, which were inverted, were pared. Two days subsequent to this, erysipelas of the scalp and face took place, preceded by a rigor. Delirium ensued early, and he remained very ill for nearly a week. The affection having subsided, healthy granulations sprung up from the surface of the sore, which speedily cicatrised, no exfoliation of bone taking place. He left the hospital perfectly free of headach on the 9th of August. I have not heard of him since the middle of Sept. at which date he was well and able to follow his usual employment—a tanner."

Dr. Auchincloss makes no remark on this case, but if the pain should return and continue severe, it will probably be necessary to trephine the depressed and diseased bone. Such was the successful proceeding adopted in some of the cases detailed by Sir Everard Home. By the way we believe that Mr. Brodie is preparing a memoir on the secondary consequences of injuries of the head.

The next and last case that we can notice, is brought forward to shew that the "puffy tumour" of Mr. Pott does not necessarily accompany the formation of matter on the dura mater. The case is short and incapable of abbreviation.

"A gentleman, aged 21, in descending a stair, fell forwards and pitched his head against the wall at the bottom of the stair. He was slightly stunned by the blow, and after a few minutes, rose up and walked home. There was no visible mark of injury on the head. He continued in his usual state of health for nearly a month. At length he became affected with head-ach, vertigo, and other cephalic symptoms. The pulse was about 40. Stupor and convulsions ensued, and he died apoplectic seven weeks from the receipt of the accident.

"*Inspection.* On reflecting the scalp and pericranium, which was everywhere firmly adherent to the skull, two fissured fractures were discovered on the upper part of the left parietal bone. These were situated an inch apart, and ran parallel to each other in an oblique direction, towards the sagittal suture, where they terminated. The dura mater underneath was separated from the bone, which was rough to the extent of three square inches. This space was occupied by dark coloured sanies, with a sloughy state of the outer layer of the dura mater. The inner surface of this membrane was of its natural smoothness and colour. The brain, particularly the cerebellum, was unusually soft."

We shall notice the other topics embraced in this report at another opportunity. Dr. Auchincloss is a well-informed, judicious, and apparently accurate surgeon. These are no mean recommendations in the present days of ostentatious pretention, and unblushing contempt of truth in medical periodical literature.

XXXII.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.

THE cases of cataract which have occurred since our last report have been numerous, and many of them highly interesting. We

will notice some of the most remarkable both for their character and circumstances.

CASE OF FLUID CATARACT.

The first case is the most remarkable, being that of a perfectly fluid cataract of the left eye, contained in a thickened capsule, which Mr. Guthrie said was exceedingly rare, and that he had never seen one so well marked as in this instance. The patient, John Jones, was 56 years of age, a gardener by trade. The cataract had existed two years—the iris was perfectly tremulous, and the pupil moderately dilated under the influence of the belladonna. On bending the head forward, the opaque body was seen to advance through the pupil, bulging towards the under part in consequence of its gravity, and was in some degree pendulous also, evidently indicating its fluid contents.

Mr. G. observed, that if the operation for extraction were performed, he had no doubt but the capsule would come out entire, and the greater part of the vitreous humour followed. The operation was performed in the presence of Mr. Thomas and a number of students, on the 23d of March, in the following manner.

The eyelids being separated, and the eye fixed with the fore-finger and thumb of the left hand, a two-edged cutting needle was introduced about two lines and a half behind the cornea, and placed in front of the capsule, which was immediately cut into, when a small quantity of white turbid fluid escaped into the anterior chamber; by this incision the capsule was evidently separated from its attachments, and beginning to descend;—no further attempts were made therefore to detach it, lest it should float in the vitreous humour. The needle was withdrawn, and the belladonna applied in order to keep the pupil as much dilated as possible.

10, p. m. He complained of pain in the head, but not in the eyes, and has vomited. Eight ounces of blood have been taken from the temple by cupping, which has relieved him. Pulv. jalapæ c. ʒj. st. sumendus.

24th. Pain returned about 4 o'clock this morning. Twelve ounces of blood were

taken from the arm, which was repeated at 4 o'clock, and again to night, producing syncope.

25th. He has passed a good night, and had no return of pain.

26th. Apparently well—wears a shade.

30th. Discharged. Cataract is entirely gone, and he is able to see nearly as well as with the other eye. The only appearance of disease remaining is the tremulous state of the iris.

CASE OF SOFT CATARACT.

James Herring, æt. 25, applied to have an operation performed on his right eye, as the white spot in it prevented his getting a place in the police. The cataract was large, soft, and white, pressing against the pupil, which was a little dilated, and, in consequence of the pressure, shewing the black edge of the uvæa. The iris had slightly altered in colour, and the patient could distinguish but very little light.

Mr. G. observed this was one of those cases in which the inflammation following the operation would without doubt, be considerable, and require the most active treatment; and although the eye would recover its natural appearance, he hardly expected the man would obtain good sight.

Feb. 25th. A two-edged cutting needle was introduced behind the iris and carried forwards between it and the lens, with its flat side lying upon the capsule. The superior cutting edge being now turned towards the capsule, both it and the lens were completely divided, and this was frequently repeated until the lens was evidently divided into several small pieces. The needle was then withdrawn, and the belladonna applied.

5, p. m. Complained of pain in the eye and side of the head, upon which 24 ounces of blood were immediately taken from the arm, and afforded complete relief.

R. Pulv. jalapæ, c. ʒj. st.

R. Cal. gr. v.—Ext. colocynth, gr. v. post horas duas.

10, p. m. He has been cupped to twelve ounces, pain having returned.

26th. A return of pain took place at 2 o'clock, shooting across the forehead, when six ounces of blood were taken from the

jugular vein, on which the patient fainted. He slept for several hours after this, and was quite free from pain in the afternoon. Bowels thoroughly open—belladonna plaister has been applied over the eye and forehead.

P. M. Pain having returned in the eye, he has been again bled to 10 ounces, and is quite relieved.

27th. Slept tolerably well during the night, and is free from pain.

Vespere. He has again complained of pain in his head and back, and has been ordered ʒj. of the vinura cholchici.

March 1st. The pupil is well dilated—very little redness of the eye and no pain.

7th. He has complained to-day of a slight return of pain in the eye—cupped to ʒviij. The broken portions of the cataract evidently diminishing in size.

23d. The absorption of the cataract going on but slowly Mr. Guthrie thought it right to repeat the operation, but it was now evident that a great change had taken place in the portions of the lens, their consistence being now much greater. In this operation the whole of the portions were brought into the anterior chamber. The belladonna was repeated as before. 6 p. m. He has complained of pain in the head and eye for which he was bled to ʒxij. with immediate relief.

Eleven o'clock. Pain has returned and the abstraction of ʒviij. of blood has afforded him immediate relief.

24th. Passed a good night and free from pain.

Nine p. m. A return of pain relieved by the abstraction of ʒxiv. of blood.

25th. Quite free from pain, and going on very well. The portions of the lens are removing rapidly.

28th. A slight return of pain has taken place. C. c. temp. ad ʒviij.

From this time to the 20th of April no treatment was required beyond the belladonna. When he was discharged the pupil was perfectly clear and round; he saw much better than had been expected and immediately obtained his place as a police constable.

CASES OF CONGENITAL CATARACT.

Elizabeth Buchanan, æt. six months, admitted having cataract in both eyes from

birth. The pupils being dilated with belladonna, and the eye fixed with a speculum, a needle was introduced through the sclerotic coat and the capsule divided which contained a small portion of soft lens—both were broken up as much as possible and pushed into the anterior chamber. The other eye was treated in the same manner. No inflammation ensued; great care was however taken to keep the pupils thoroughly dilated by the belladonna. Six weeks after this operation, that is in the beginning of November, the needle was again introduced in both eyes for the removal of a small portion of capsule. The belladonna was reapplied as before. No inflammation ensued, and the child was discharged cured—without a vestige of disease and apparently seeing very well.

Frederick Saene, æt. four admitted November 10th, 1829. Cataract in both eyes. This child is also dumb and nearly deaf. November 11th. Mr. Guthrie broke up the cataracts of both eyes in a similar manner with the last case.

Nov. 21. The child has not suffered from the slightest degree of inflammation. The pupils are quite clear, and the child can see to run about, avoiding every thing in its way.

ANOMALOUS CATARACT.

Ann Brunun, æt. 28, admitted having an anomalous cataract in the left eye. The opacity occupies only the inner half of the lens and capsule when the pupil is dilated and presents a very defined margin somewhat of a circular form. There are a few opaque spots on the other parts of the capsule, but the difference between the inner and outer half of it is very remarkable. She says that she suffered an attack of inflammation in this eye when she was two years old, and which she believes has caused this complaint, and wishes to have it removed on account of the deformity it occasions.

Dec. 2d. Mr. G. passed a two edged needle through the sclerotic coat, and into the capsule, on the division of which a substance something resembling white powder started forth, rendering the aqueous tumour very turbid, not however sufficiently so to pre-

vent a complete division of the capsule, which cut like a piece of parchment. Belladonna ordered to be applied night and morning.

Dec. 13. She has suffered little pain since the operation, and it has not been necessary to abstract blood. One small piece of capsule alone remains in sight, which she does not consider any detriment, and says she can see a little with it, which she could not do before.

CAPSULAR CATARACT AFTER INJURY.

Eliza Uyan, æt. six. Has a capsular cataract in the right eye, apparently from an injury—there being a small cicatrix at the upper margin of the cornea as if something had penetrated that membrane. The capsule was broken up on the 2d of March, and on the 13th she was discharged, the pupil being quite clear, and the sight tolerably good—no inflammation supervened, and the treatment was confined to purgatives and the application of the belladonna.

CASE OF HARD CATARACT.

Edward Thompson, æt. 40, was admitted April 24th, having lost the left eye, which was sunk in the head after an operation performed in the country two years ago—the right eye appeared perfectly sound, with the exception of a hard cataract.

Mr. Guthrie standing behind the patient fixed the eye-lids and the eye-ball with the fore and second finger of the left hand. He then carried the extracting knife across the cornea, completing the punctuation but not allowing it to cut its way completely out. The patient having slightly recovered from this, the guarded knife was passed through the opening, and its cutting edge being pushed forward divided the remaining portion of the cornea upwards. The capsule being now torn with the hook, the lens gradually advanced and was removed. The cut edges of the cornea were duly adjusted and the patient put to bed.

April 27th. There appears a slight threatening of inflammation, but the patient experiences no pain. C. c. ad 3viij. temp.

From this time to May 16th he has not had an unfavourable symptom, and he is now ready to be discharged—the pupil being perfectly clear and his sight restored.

XXXIII.

PROCEEDINGS OF THE OBSTETRIC SOCIETY.

In consequence of the numerous instances which had occurred, within the knowledge of many medical practitioners, of great mischief produced by the indiscriminate practice of midwifery, some gentlemen were induced to form themselves into a society, at the end of the year 1825, for the purpose of promoting obstetrical knowledge and of protecting the public from the injuries to which they were exposed. The Obstetric Society originally consisted of thirty-one members, and, since its establishment, no others have been added. It includes the names of most of the present and former physicians and surgeons of the obstetrical institutions, as well as most of the lecturers on midwifery in this metropolis. A subscription of two guineas from each member has been found sufficient to meet all the expenses which it has, up to the present time, incurred.

As it was the great object of this Society to act in unison with the three medical corporate bodies, and as not one of those bodies acknowledged midwifery as a part either of physic or surgery, by examining candidates on their capability to practise this branch of the profession, the most proper and direct course for the Society to pursue was thought to be that of addressing the three corporate bodies, stating to them strongly and broadly the feelings which the Society entertained on the subject, and requesting to know whether they were disposed to obviate the causes of the calamities complained of. Provided, however, the constituted medical authorities did not consider themselves invested with sufficient powers; or, possessing those powers, they did not feel inclined to exercise them for the public good, the Society declared their intention of appealing to the Legislature, for the accomplishment of that object, which would then appear to be attainable by no other means. They suggested, at the same time, that all the desired advantage might be gained, and the proposed protection of the community would be most easily secured, by each body, enquiring for itself, through its own examining Board,

into the extent of the knowledge of midwifery possessed by each candidate who came before them. This mode of proceeding seemed to the Society to offer the fewest obstacles and to be most free from objections; as it would leave the relative situations of the three corporate bodies undisturbed, whilst it would secure to the public the certainty of having qualified practitioners in midwifery as well as in the other departments of the profession.

To this letter, which was dated March 20th, 1826, the apothecaries first replied; and, in their answer (bearing date April 4th) they stated that "they were well satisfied of the existence of abuses occasioned by the indiscriminate practice of midwifery, and would be happy, if it were in their power, to render assistance in promoting the laudable object of the Society; but they were of opinion that their Act did not give them *any authority to superintend and regulate the practice of midwifery*. They considered the subject well entitled to parliamentary interference, and stated their willingness to conduct examinations in midwifery, provided Parliament would commit to them the responsibility.

In the reply of the College of Physicians, on June 9th, the grand question was completely evaded. It merely consisted of a resolution to the effect that "the College was best satisfied when midwifery was practised by those who had been found on examination before them, to be competent to the exercise of the profession at large, by their knowledge and acquirements; that the delivery of women was an act of manual skill; and, therefore, in the province of surgery; and that the treatment of the diseases of pregnancy and the puerperal state, was a part of the general practice of physic, and, as such, liable to the enquiry of the censor's board."

In the answer of the College of Surgeons, which was not received till July the 19th, four months after the Society's address was presented, the positions laid down by the Society were tacitly admitted as true, by the expressions "*that the College were not invested with sufficient power to obviate the evils sta-*

ted by the Society to arise from the want of legislative regulations over the practice of midwifery."

The Society now felt that its next endeavour might, with propriety, be directed towards obtaining the interference and powerful aid of Government in a cause which so intimately concerned the whole community; and a resolution to the effect of addressing His Majesty's Secretary of State for the Home Department was passed in January 1827. Still, however, being willing to afford to the three corporate bodies another opportunity of co-operating with the Society, in the settlement of the question, the Society resolved to address them once more, apprising them, at the same time, of their determination to apply for the assistance of Government.

The replies of the chartered bodies, on that occasion, followed each other more speedily;—first from the surgeons, on February 17th, 1827, who stated "that their College was instituted solely for the purpose of examining and attesting the capability of persons to practise the art and science of surgery; consequently, being solicitous that those persons who conduct the examinations, should be particularly skilled in surgery, the College had excluded from the Court of Examiners those surgeons, whose time and attention had been occupied in learning and practising the obstetric and pharmaceutical departments of medicine:—that the council of their College did not perceive how it could compel even its own members to submit to examination in midwifery:—that no tribunal, for examining and attesting the capability of persons to practise midwifery, had yet been instituted; but that the College *would willingly form a board of examination for the midwifery department of medicine*, provided the Government of the country deemed it necessary and would give them the requisite authority for that purpose."

On February 22d the apothecaries returned an answer referring the Society to their former letter, and on February 27th the physicians replied, and declined giving any more explicit answer.

The Society then addressed a memorial to Mr. Peel, March 20th, 1827; in which

the replies from the three corporate bodies were commented upon, the great responsibility which attaches to the practitioner in midwifery demonstrated, the necessity that exists for every medical man making himself acquainted with that branch of the profession, and the impossibility of detaching it from the general science of physic and surgery, or of studying it separately, clearly shewn. It was also brought before the notice of the Secretary of State, that instruction in midwifery and the diseases of women and children, at that time constituted no necessary part of the courses of lectures, as required for examination on medicine and surgery, and the object of the Memorial was declared to be "to oblige all persons, who present themselves for examination before the three corporate bodies, to procure such information on the subject of midwifery, as should give them competency to practise it:—and to induce the examiners not to neglect the enquiry into such competency in those who present themselves before them as candidates for admission into their respective bodies." It was urged that the protection sought might be best afforded by the *BY-LAWS* of the corporate bodies being so altered as to ensure professional instruction and examination in this branch of medical science; and, by the repeal of those other *BY-LAWS*, or the discontinuance of those customs, by which men, who have added practical information on midwifery to their other acquirements, are excluded from the examining Boards. It suggested that the same power which was given by Act of Parliament to the Corporate Bodies to prevent unqualified persons practising the other branches of medicine and surgery, should be extended also to midwifery;—and, lastly, it declared, that the members of the Society could not allow themselves to be selected for the purpose of forming a *separate Board* for the regulation of the practice of midwifery, as such a proceeding would imply a *partial* acquaintance with a profession which they had studied as a *whole*, and which they had practised as a *whole*, in common with the other members of the Bodies, to which they individually belong.

At the same time, a communication was

made to Mr. Peel, that a deputation of the Society had been empowered to wait on him, for the purpose of elucidating whatever might appear imperfectly explained in the Memorial; and the Right Honorable Secretary appointed that those gentlemen should attend him on the fourth day after the receipt of the papers. At this interview, Mr. Peel stated that he had read over attentively the Memorial and correspondence; he approved the intention of the Society; admitted the importance of its objects; and promised to refer the Memorial to the three Corporate Bodies, whose subsequent answers to the Secretary of State were transmitted to the Society in July 1827.

In their official answer, the College of Physicians considered the examinations entered into at the College, on diseases of women and children, a sufficient test of the candidate's knowledge on those points; and the act of delivery, an operation of a surgical nature. Yet the surgeons in their reply; far from agreeing with the latter position, contended that, *by admitting practitioners in midwifery into their council, they would "weaken that respect which the public now entertains for, and the confidence it now has in, that council."* They further observed that, *"they had hitherto elected, as examiners, such surgeons as they believed had, in the early period of their lives, been accustomed to pass their days in hospitals and their nights in the study of their profession; and not in the avocations of a lying-in-chamber."** They, however, informed the Secretary of State, that they had, since the Society's first application to them, passed a resolution requiring certificates of attendance on two courses of lectures on midwifery from each candidate for a surgical diploma.

The Society of Apothecaries, on the other hand, in their reply, "considered the object of the Obstetrical Society as tending highly to the benefit, welfare, and happiness of the community, and to the usefulness of the medical profession." They "called the serious attention of the Secretary of State, to the subject; and expressed a hope that some legislative measure might be devised which would, in future, afford security to the pub-

lic that practitioners in midwifery were well educated in that branch of the medical profession, and fully competent to the practice of it." But, although perfectly convinced of the propriety and necessity of instituting examinations on this subject they thought the powers they possessed did not authorize them to undertake such a duty.

The statements brought forward and arguments used by the three Corporate Bodies, on this occasion, demanded severally the notice of the Society; and accordingly, a second Memorial was laid before Mr. Peel, bearing date March 21st, 1828, in which, the Society, after disposing of those replies, submitted to his consideration an easy and simple plan for placing the practice of midwifery on a respectable footing; viz. that the Colleges of Physicians and Surgeons should be recommended to annul their respective BY-LAWS, by which the fellows of the former, and the members of the Court of Examiners and council of the latter College are precluded from the practice of midwifery; and that they should also be recommended to examine all their candidates on midwifery, as well as on the other branches of medicine and surgery;—while, to the Society of Apothecaries also authority should be given to institute examinations on midwifery.

In the month of January 1829, the committee of the Society was informed by one of its members, that he had had an interview with Mr. Peel, on the subject of the Society's second Memorial, in which Mr. Peel entered on the different points suggested to him with the greatest kindness, and most deliberate attention. He promised to refer that part of the Memorial, containing the Society's propositions, to the Corporate Bodies for their reconsideration;—to see the leading members of the Physicians' and Surgeons' Colleges, on the subject; and, having so done, to forward the replies from the Medical Bodies to the Society.

After the lapse of five months, during which time, no fresh communication reached the Society, the chairman, having written to Mr. Peel, requesting to know whether any reply had been forwarded to him from the Colleges of Physicians or Surgeons, received from that gentleman a note, enclosing a pa-

* See comments at the end of this document.

per which had been delivered to him a few days before, by the President of the College of Physicians. In this paper, the question was approached, for the first time, with something like earnestness, by the College of Physicians. The President having briefly adverted to the history, constitution and objects of the College, said "*they could not repeal their by-laws* respecting practitioners in midwifery," but proposed, in the name of the College, that, as often as any physician offered himself for examination, preparatory to his license to practice, and declared his intention of adding midwifery to the practice of physic, he should be examined before the Censor's Board, by some licensed physician at that time practising, or who had practised midwifery, who should be called in, as an assessor, for the purpose of enquiring into his qualifications in the manual branch of that Art." No reply has, up to this time, been received by the Society from the College of Surgeons. The Company of Apothecaries, however, in accordance with their declaration made both to the Obstetric Society and Mr. Peel, have evinced a strong desire to forward the views of the Society; the chairman of the Examining Board of that body called upon the secretary of the Society in August last, to enquire how far the Society had obtained their objects, in regard to the Colleges of Physicians and Surgeons; and, in what way the Apothecaries' Company could further assist the Society. He said they had resolved to require certificates of attendance on two courses of lectures on midwifery, and the diseases of women and children, from each candidate. They were still of opinion that their act did not give them the power to examine on midwifery; that they would be willing to undertake any duties of examination in midwifery that the Legislature might think proper to require of them, but they were all agreed that any such extension of their act must come from the Government, on the suggestion of the Obstetric Society, and was not to be considered as solicited and promoted by the Apothecaries' Company.

In consequence of this spontaneous declaration on the part of the Apothecaries' Company, the Committee of the Obstetric So-

ciety addressed Mr. Peel once more, calling his attention again to the objects and wishes of the society, and to the determination of the Corporate Bodies; and ventured to request the Secretary of State to obtain for them the opinion of the law officers of the Crown, as to the power possessed by the College of Surgeons and Apothecaries' Company, with regard to examinations in midwifery; in order that if this opinion should be favourable, the two bodies just mentioned might, at once, act upon it; but, should it prove unfavourable, the Society then hoped the Right Honorable Secretary would concede to these two bodies the requisite powers for that purpose; and at the same time, sanction the introduction into the House of Commons, of a Bill rendering it penal for any man to practice midwifery, who is not a legally authorized physician, surgeon, or apothecary.

This letter called forth from Mr. Peel, in December 1829, an answer to the effect that, if the Apothecaries' Company were uncertain as to the full extent of the powers which they legally possess, and were desirous of obtaining a legal opinion on the point, he must leave it with the board to exercise their discretion, in respect to taking such an opinion. He must decline making a special reference from the Home Department to the law officers of the Crown upon the subject; neither could he undertake the introduction into the House of Commons of a Bill such as was proposed by the Society.

An abstract from Mr. Peel's letter was forwarded to the Company of Apothecaries, and a reply from the Secretary to the Court of Examiners was received by the Society in the beginning of February of this year, enclosing the opinion of the Attorney and Solicitor General to the effect that the Court of Examiners of the Apothecaries' Company have no power, by the Act of Parliament, to examine in the art of midwifery, which is, in no respect, comprised in the Act.

At the next meeting of the Committee, it was resolved that the chairman of the Society should wait upon Mr. Peel, as a deputation from the Society, for the purpose of forwarding the objects in view, this resolution was complied with; the conversation

was principally directed towards the offers made by the Colleges of Physicians and Surgeons, and the opinion of the Attorney and Solicitor General respecting the power possessed by the Society of Apothecaries, under their Act, was brought forward.

The Society was next called together on the 18th of this month, and it was determined that the three Corporate Bodies should be again addressed. It was suggested to the College of Physicians that the regulation they proposed should be extended to *all* candidates who present themselves for a license at the Censor's Board, instead of being limited to those only who, at the time of their examination, might declare their intention to practise midwifery; for, it appeared to the Society, that it might happen that candidates, who had no intention to practise midwifery when they applied for a license, might be inclined, at a future period to add that branch of practice to the practice of physic;—and it seemed but just that all physicians who were not precluded by the established rules of the College from practising midwifery, should prove before competent judges their fitness for that duty.

To the College of Surgeons the Society expressed their satisfaction at the regulations they have adopted, requiring from their candidates certificates of attendance upon lectures on midwifery; and trusted that they would see the necessity of instituting examinations by their own examining board, on this branch of surgical science. And to the Society of Apothecaries they offered their thanks for the attention which their former letters had received from that society, and expressed their desire to render their assistance to them in endeavouring to obtain an Act of Parliament authorising the Society of Apothecaries to examine those candidates who come before them as to their qualifications to practise midwifery. The Society now wait for any other communication from the three corporate bodies.

It must be observed that, on the institution of the Obstetric Society, it was resolved that its objects should embrace the regulation of the practice of midwifery with regard to *female* as well as *male* practitioners; but

it has been thought right to direct the attention of His Majesty's Government at present only to those persons practising midwifery, over whom the medical bodies ought to possess some control, no mention has therefore been made as yet of the injuries to which the poorer classes of the community are exposed from the mismanagement of women imperfectly educated in the duties of their profession.

The Society however has not been unobservant of such dangers, and is most desirous that some means may hereafter be adopted to correct this grievous abuse.

It is also to be remarked that the Society was originally formed with the *sole intention* of ensuring the welfare of the public, as far as midwifery is concerned; and that, at one of their first meetings, it was resolved that, when the object of regulating the practice of midwifery shall have been carried into effect, its existence shall become extinct."

We conceive that the thanks of the medical profession generally, are due to the Obstetric Society, for its exertions to ensure competent skill, or at least instruction, in obstetric practice. The exertions have been partially—and but partially, crowned with success. Certificates of attendance on midwifery lectures are now rendered imperative on all candidates for diplomas at Surgeon's and Apothecaries' Hall. This is a very considerable point gained by the obstetrical Society; but the answers of the Colleges of Physicians and Surgeons—more especially of the *latter*, to the Society and to the Secretary of State, will not tend much to enhance the opinion of their zeal in the cause of humanity. The sarcastic expressions, in the answer of the College of Surgeons, which we have marked in italics, were extremely unwise—indeed, we might say, *illiberal*. This metropolis, nay, every large town in the kingdom, has long contained practitioners in midwifery, who would do honour to any board that ever sat in Lincoln's-inn-Fields. As to those who have "spent their days in hospitals, and their nights in study," we revere them exceedingly; but we ask the heads of the College whether they trust their wives and daughters, when in the par-

turient state, to such men—and whether they consider the Clarkes, Merrimans, Davis's, Granvilles, Leys, Blundels, Locoeks; Ramsbottoms, Conquests, and hosts of other obstetric practitioners, as *INFRA DIG.* the moment that the *difficulty*, and too often the *danger* of parturition is over? But we are not inclined to pursue the subject farther, on the present occasion. It is a melancholy reflection that, in all ages of the world, the longer men live, the more they become convinced that MAN is the most vain, silly, and selfish animal that crawls on the surface of the earth.

In respect to the powers possessed by the Apothecaries' Company, as to obstetrical examinations, we conceive, with all due deference to themselves and to their legal advisers, that they have as ample power to examine into every thing connected with the parturient state of a woman, as with the gouty state of a man. The anatomy and physiology of the gravid uterus are surely legitimate subjects of study for the physician as well as the surgeon;—and the spontaneous or assisted evolution of the matured fetus is as necessary to be known as its growth and nutrition during utero-gestation. And who, we ask, is to dispute the authority of the Court of Examiners?—Would any student, in his senses, bring his examiners to trial for *rejecting him* on account of *ignorance of midwifery*? No verily! They have nothing to fear on that head—nothing to prevent their going as deeply as they please, into all obstetric matters. *Sat verbum sapientibus.*

XXXIV.

CASE OF COMPLETE SECTION OF THE TRACHEA AND ŒSOPHAGUS, WITH RECOVERY, EXCEPTING AN AERIAL FISTULA. By Dr. LUDERS. (Journal Complément. April, 1830.)

A man, 37 years of age, of athletic constitution, being pursued by the peace officers, cut his throat (with a pruning knife) in a very extensive manner, and was found lying on his face weltering in blood. He was immediately conveyed to the hospital. The trachea was found to be severed across, between the first and second cartilages, as also

the œsophagus, the wound penetrating to the bodies of the cervical vertebrae, without wounding any of the great vessels or nerves.

The muscles only suffered, and even the sterno-cleido muscles escaped. The wretched suicide had plunged the crooked point of the knife into the neck at one side of the trachea, then pushed it under that tube and the œsophagus, and, by drawing the instrument outwards, severed the alimentary and aerial conduits completely! The patient was pallid, deprived of speech, and could breathe only when lying forward on the belly, so as to permit the blood to flow out by the external wound. The man violently rejected all assistance, and passed the night in the position above mentioned. Dr. Luders having ascertained the total section of the trachea and œsophagus, prognosticated the death of the man by starvation. Nevertheless, he endeavoured to introduce an elastic canula into the œsophagus, for the purpose of conveying some milk into the stomach; but was prevented by violent efforts to vomit, and by threatenings of suffocation. As he complained much of thirst, any liquid taken into the mouth passed out by the wound, or trickled into the trachea and excited vomiting.

Second day. Dr. L. attempted to reunite the divided extremities of the trachea by means of ligatures; but was entirely foiled by the convulsive efforts to cough. The patient had expectorated a large quantity of bloody mucus in the night, and was this day able to lie on his back, making signs of hunger. Some gruel and laudanum were thrown up per anum, and an instrument was ordered to be made for conveying nutriment into the stomach through the œsophagus.

Third day. The man had slept some hours between the paroxysms of coughing. He was free from fever; and, setting aside the hunger, he appeared to be comfortable. The point of the instrument being introduced into the œsophagus, some milk and egg was passed into the stomach, by which the sense of hunger was a little diminished.—Another attempt at reuniting the divided trachea failed, as might be expected.

Fourth day. The patient had slept well, and felt himself better to-day. On taking

some milk into his mouth, a little of it escaped down into the stomach, while bending his head forwards on the chest. On the fifth day, the power of swallowing was still farther increased—the exterior wound was diminishing, and the patient took a cup of flour and milk boiled, the greater part of which went down into the stomach. We need not pursue the details in the minute manner which the writer has adopted. It is sufficient to state that the power of swallowing is restored—and that the patient breathes through a tube in the trachea, which has now been continued there for the space of two years. This forms the third or fourth instance of the same fistulous communication, rendered necessary for the preservation of life. We put the first on record 15 years ago, and the patient (Mr. Price, of Portsmouth) still breathes through the tube.

Ambrose Paré mentions the case of a man, whose trachea and œsophagus were totally severed by the stroke of a poinard, and who died on the fourth day from the accident.—The great vessels escaped. Placentius alludes to a case, where the trachea and œsophagus were both wounded by the weapon of a suicide, the jugulars and carotids remaining secure. The patient recovered in a month. Other instances are related in the writings of Helwig, Purnann, Starck, Debruck, Kurtzwegg, &c. We have seen a case where the trachea was totally, and the œsophagus partially, severed, in the person of a Malay, and where recovery was complete in six or seven weeks. The case is detailed in an early number of this Journal. Such instances may guard our prognoses against too much despondency, and even assist our modes of treatment, under similar circumstances.

XXXV.

CASE OF APOPLEXY OF THE SPLEEN. By
Mr. HENRY ANCILL.

George Golding; a labouring blacksmith, 39 years of age; an habitual drunkard, his favourite liquor being rum, of which he would ordinarily take from half a pint to a pint, and occasionally a pint and a quarter before breakfast; his appetite was in general uncommonly good,—bowels regularly evacuated every morning about six o'clock,

and he is said to have been a hard working man, of a mild temper, and inoffensive habits.

He suffered under an attack of hemiplegia ten or eleven years ago at Whitsuntide holidays, which was removed after three weeks medical attendance, the principal remedies employed, having been, a very copious bleeding, purging, friction and warmth; the only remnant of the affection was a slight distortion of the mouth sideways.

Two months ago he had an illness which is stated to have been pleuritis, seated in the right side, and was subdued in fourteen days, by repeated bleeding and the usual remedies:—since this his health gradually improved, he got fat, and latterly his appetite was so great as to become a subject of remark with his fellow workmen.

On Friday morning, April 30th; he rose at the usual hour perfectly well, the bowels acting soon after; he then went to his ordinary labour and continued at it until the moment of the present attack, which occurred on leaving off, for the purpose of taking his breakfast; in the course of the morning he had remarked that he never felt better in his life, and drank in two portions a quarter of a pint of rum in a pint of porter.

At half past 9. I was called to visit him; I saw him first sitting in a bent position upon a low seat close to the forge, his head resting on his arms, and his arms upon his knees; the statement made, was that he had been suddenly seized a few minutes before with the symptoms he then laboured under; these were, nausea, a sense of weight in the epigastrium, most profuse perspiration, pale face, extremities below their natural temperature, and an undulating pulse of about 120 in a minute, full, soft and regular; in reply to enquiries I was informed that his first complaint was of nausea, but he did not vomit, and that the appearance of the face was natural; he was immediately conveyed to his lodgings.

Ten o'clock A. M.; examined in a recumbent position. The perspiration has now subsided; great pain is felt upon pressure, in the epigastrium extending to the umbilicus and throughout the left hypochondriac region; the abdomen is rather warmer than

natural; pulse 130, stronger and still perfectly regular; the other symptoms remain the same.

Sumat. statim hydrarg. submur. gr. vj. R Sodæ sulphat. ʒi.

Infusi sennæ ʒ iv.

Decoct. farinæ ex semin. avenæ ʒviij. ut fiat enema statim adhibendum.

His wife was directed to send a statement of his feelings after the return of the injection which she failed to do.

Six o'clock P. M. The bowels have acted six times from the operation of the purgatives, and there has been a free discharge of urine, the appearance of both are natural; he now complains of violent pain diffused over the whole abdomen, but most particularly seated in the above described regions, and greatly aggravated by pressure; is most easy in a bent position, or as he terms it, when *doubled up*, and is still capable of exertion, moving on and off the bed without assistance; there is now also an appearance of fullness in the left hypochondriac and iliac regions; great thirst; tongue very dry; no perspiration; the respiration somewhat laborious; the trunk of the body is warmer, but the extremities below their natural temperature, and the pulse 140—in other respects as at 10 o'clock.

These symptoms approaching nearer in character to peritonitis than any other disease—a free opening was made into the basilic vein, the blood at first flowed freely, but gradually, after bleeding a few ounces; and in the space of about two minutes ceased.

Upon reviewing the case it was now referred to hemorrhage into the abdominal cavity and all hopes of relief given over.

Nine o'clock P. M. Complains of excessive pain over the whole abdomen, the respiration is more laborious; extremities cold; lips and countenance exsanguine, and the pulse sinking.

R Tincturæ opii ℥ xxxv.

Spiritus æther. sulph.

lavendulæ c. āā ʒss.

Misturæ camphoræ ʒxss. misce ut. ft. haustus statim sumendus.

May 1st. 1 o'clock, A. M. Mortuus est; being about 16 hours from the commencement of the attack.

Post mortem examination by Mr. Alexander Thomson. The body was remarkably well proportioned, plump and solid. *Thorax*, resounded well in every part upon percussion. *Left leg*, had the remains of an impetiginous eruption upon its anterior and exterior side.

HEAD.—The integuments adhered firmly to the pericranium; the cranium was thick and ivory-like in its texture, having very little *diplœe*; *dura mater* had its minute arteries considerably more injected than usual, the *arachnoid membrane*, was separated from the *pia mater* by a considerable quantity of colourless serum and was opaque in every direction; a great deal of colourless serum was also seen between the convolutions of the cerebrum and cerebellum; the *pia mater* adhered so laxly to the substance of the brain as to be removable by the slightest effort, its arteries were full but its veins destitute of blood; the *cerebrum* was unusually firm and unyielding both in its cineritious and medullary portions, and presented but few red points in its sections; the *nerves* were all remarkably firm and white at their origins; the *cerebellum* was very soft and apparently destitute of elasticity, it yielded easily to the pressure of the fingers; the *pons varolii* and *medulla oblongata* were nevertheless exceedingly hard; the *lateral ventricles* were greatly dilated and filled with a limpid almost colourless serum, yet the processes of cerebral matter in them were usually firm; the *veins* of the fornix contained blood, but those of the plexes choroides, and the *vena magna galeni* were quite empty, as were also the arteries of the plexus; the *pineal gland* was larger than usual, it contained in its capsule some limpid fluid and one hard, round, smooth, strong, concretion; the *third* and *fourth ventricles* also contained fluid of a description similar to that in the lateral ventricles; and there was a considerable quantity in the base of the cranium.

THORAX. The muscles of the trunk were very pale, and together with the *cellular tissue* remarkably destitute of blood; the *lungs*, though covered with rather more sub-pleural black spots and reticulations than usual, were yet very healthy; they adhered slightly by old adhesions to the upper part of the parietes of the thorax on both sides and to the

diaphragm, having each, at about the centre of the lateral aspect, a small puckering of pleural investment resembling a cicatrix, and within this a few condensed and indurated lobules, as though there had been small cavities which were obliterated; the *pericardium* was healthy though unusually loaded on the exterior with fat, and it contained about six drachms of greenish transparent serum: the *heart* was natural in size, greatly loaded along the course of its vessels with fat, its substance of an exceedingly pale yellowish white colour, flabby, lacerable and adhesive to the fingers; the *lining membrane* of all its cavities was opaque in many parts; the *mitral* and *tricuspid* valves, were opaque but not thickened, though the ligaments surrounding the auriculo-ventricular orifices were indurated and semicartilaginous in some spots; the *semilunar valves* both of the pulmonary artery and of the aorta were opaque; those of the former not being thickened: those of the latter thickened and semicartilaginous: all were imperfect round their attachments, having greater or less perforations towards their free and floating margins:—that these perforations were not recent was evident, because their edges were not ragged, because they could not be extended by considerable force, and because their polished smooth surface was traced to pass continuously over the edges of these orifices.

ABDOMEN. When cut into it discharged a great quantity of dark-coloured bloody serum, and when opened it displayed an enormous black coagulum investing and attached to the lower or floating margin of the great omentum, extending from the right hypochondriac, through the umbilical and into the left hypochondriac regions. In the last situation it was materially increased in size, so that when carefully separated it would have filled a pint pot: upon the whole of this extraordinary mass being removed, a small laceration not larger than the tip of the finger, through the peritoneum and tunic of the spleen was observed at a spot where this organ had become attached by its superior edge to the diaphragm:—no other aperture could be ascertained in the peritoneum; the *spleen*, which was now carefully examined

appeared enormously large, it was attached superiorly to the diaphragm, by the whole of its concave surface to the cul-de-sac of the stomach, and by the greater part of its external superficies also to the diaphragm. When carefully removed and cut across, its substance appeared lacerated into large angular fragments, which were kept together by a cement of dark black coagulum;—the natural inference from which was, that the vessels of the substance of this organ had given way, an opinion strengthened by the fact, that this cementing portion of coagulum was continuous with a mass an inch and a half thick of the same substance which invested the whole of the organ, between the parenchyma of which and its fibrous envelope, it had been deposited: the substance of the angular fragments yielded to the slightest pressure of the fingers, and broke down into a soft pap-like mass, so that the vessels could not be traced:—the spleen in truth was not enlarged, but its vessels having given way, the blood was discharged into its substance,—tore it into fragments,—separated its parenchyma from its fibrous envelope, which it first violently distended and then ruptured in two places, at its upper and at its most depending part; for from the latter the blood had escaped in large quantity, and separated the two layers of the descending mesocolon from each other, to the distance of an inch and a half, as far down as the sigmoid flexure; the *liver*, was remarkably large, externally firm, and of a mottled appearance like a piece of granite, internally of a dirty pale buff-yellow hue, and easily broken into granules by pressure; the *gall bladder* was distended with bile of a natural colour; the *mesenteric and intestinal vessels*, were more than ordinarily destitute of blood; the *intestines* healthy; the *stomach* contained, apparently unchanged, some gruel which he had taken shortly before his death, all its coats were remarkably thin, and towards the cardiac orifice its villous coat had several patches about the size of half-a-crown, covered densely with stellæ of red vessels; the *pancreas* and all the rest of the viscera presented their usual characteristics.

Oxford Street, May, 1830.

N. B. The above dissection, so ably and

minutely described, is interesting in many points of view, as shewing the state of organs in a man habituated to so much strong drink, and cut off apparently in the midst of health.—*Ed.*

XXXVI.

CATALEPSY.

A case of this strange disease having recently appeared in the Royal Infirmary of Edinburgh, the clinical remarks of Dr. Duncan have been collected and published in a weekly contemporary. We shall take a short notice of this case, the more especially as one not very dissimilar is at the present moment under our care.

The northern patient was a young woman 25 years of age, who became affected with catalepsy about the first of February of the present year, and was received into the infirmary on the 5th of the same month. She was first discovered sitting in the kitchen like a statue, stiff and insensible—yet her limbs yielding easily to any force which was applied, and remaining in any position in which they were put. When received into hospital, there was complete loss of voluntary motion occurring in paroxysms, and continuing about ten minutes at a time, during which the limbs retained a certain degree of flexibility, but resisted, to a certain extent the application of external force. During the fits there were slight convulsive writhings of the muscles—the eyes were not turned up, as in epilepsy, but rolled about, the pupils dilating and contracting. Before the commencement of the paroxysms she feels a fluttering about the heart, general faintness, and heaviness about the head. After the paroxysm is over, she feels a universal soreness of the limbs, as epileptics do, attended with a severe pain in a certain part of the spine, which is tender to the touch. The tongue was white, pulse 70 in the intervals; but rapid and feeble during the fits. *The catamenia had appeared at the proper period, before the commencement of the disease, but were suddenly suppressed by cold.* Some inhuman sceptic had torn two pieces of skin off her hands in one of these paroxysms!

The case continued much the same, not

at all relieved, till the 15th of February, when severe pain was complained of in the right iliac region, which though reasonably considered as nervous by Dr. Duncan, was treated by leeches lest inflammation should actually exist. During the cataleptic paroxysms she was of course, free from pain; but the moment they were over, she screamed out from the violence of the agony. The iliac region was extremely tender to the touch; but no tumour was perceptible. The leeches bled freely—a fetid enema was thrown up, but speedily returned. Powerful anodynes were given both by the mouth and anus, yet without any effect. A warm bath and a still more overwhelming opiate allayed the agony. In the course of little more than 24 hours she had taken 125 drops of Battley's sedative liquor, 120 drops of common laudanum, two grains of solid opium, besides castor, æther, valerian, and most of the stinking drugs in the pharmacopœia. These and other circumstances induced Dr. Duncan to conclude that the disease was of a purely nervous character, and, in fact, that it was one of those singular and strange forms which hysteria occasionally assumes.

After this the complaint took on another new but temporary form. On the 3d of March the patient received some unpleasant intelligence, and requested her dismissal. This being refused, a very severe paroxysm occurred, and lasted three quarters of an hour. Several of these attacks came on in the course of a few hours.

"During the last fit, the mental functions appeared to be maintained in considerable precision; she sung psalms, and prayed with exactness and correct modulation; and once having stopped short in repeating the Lord's prayer, she, in a few seconds, resumed it where she left off. The most extraordinary circumstance, however, was the singular action of the muscular system; at one time she was bent entirely backwards, resting only on the crown of her head, and her heels as in opisthotonos; again, she was bent forwards, and, finally, she was drawn forcibly to either side. In short, during this attack, all the phenomena of epilepsy, hysteria, and well-marked tetanus, were present."

Soon after this the patient was attacked with variola, and on the last of March she was dismissed in a state of tolerable convalescence. It appears, however, that, on the 19th of April, she returned to the hospital with all her symptoms nearly as violent as ever.

Dr. Duncan appears to have taken considerable pains to prove that, contrary to the doctrine of Cullen, catalepsy may be real, and not feigned. We have not the smallest doubt of the reality of the disease in the foregoing, and in many other cases. We are, at this moment, attending a young lady who has cataleptic attacks every day, and many times during each day. They are generally so transient as to be mostly imperceptible in company—and her great object is to conceal them. They escape notice, except upon particular occasions. Thus, if she is reading, or playing on the piano-forte, the sudden cessation of voice or action is remarked, of course. But if she is merely sitting in company, or joining in general conversation, it is ten to one if the cataleptic suspension of volition be perceived. Once in six or seven days she is seized with a convulsion, in all respects answering to pure epilepsy. The attack commences with a shriek—she falls down—struggles violently—becomes hideously distorted—bites her tongue—and requires two or three attendants to constrain her contortions. She then falls into a profound sleep, and awakes sore and rather poorly, but unconscious, except by these sensations, of what has passed. The complaint has been gradually increasing in violence and frequency, from the age of six to sixteen years. The catamenia have only appeared once, and have not since recurred. Moving in a high sphere of life, this young lady has had the very best—and perhaps the very worst, advice which England could afford. Not the slightest impression has over been made on the distressing malady—on the contrary, it has progressively augmented in force. Although the intellectual faculties have suffered less than might have been expected, they have not escaped uninjured. The memory is impaired, and application to some particular studies is greatly

abridged. She dares not indulge in music—and she is incapable of making the slightest progress in arithmetic. She cannot perform even the most common operations in figures. She delights in history; but the impressions are like those made in water, or, at most in sand. They are soon obliterated. The eyes are expressive—the pupils very large—the complexion exquisitely fair—the features beautiful—the temper mild—and the anxiety to be relieved from her malady intense. The intestinal secretions and excretions are exceedingly depraved—and the catamenia are stopped. These last are phenomena which she cannot feign, if she would;—but who could be so sceptical, or rather so insane, as to imagine that the other distressing phenomena, which deprive her of the pleasures which her rank in life entitle her to, and which she longs for, can be the work of deception? It is preposterous. Her great object is to veil her attacks, and the cataleptic paroxysms usually escape the observation, except of her parents or intimate relations. If she is reading, for example, she will suddenly stop, for an instant—perhaps for half a minute or a minute; being, for that period, like a marble statue—and then she utters a kind of sigh, and takes up the word, or part of the word, where she had stopped. Considering the length of time which the complaint has obtained, we cannot, of course, form any sanguine hopes of recovery. The first object which we have in view, is to correct the alvine derangements and to reproduce the uterine functions. The result of the case we shall freely and candidly communicate to our readers.

To revert to Dr. Duncan's patient. After concluding that her malady was not feigned, and, indeed, could not be feigned, he remarked as follows:—

"The symptoms of the case viewed together, might be arranged under the following heads: 1st, total loss of external perception and sensation; 2dly, suspended volition; 3dly, the continued action of the mixed and involuntary muscles. It was a matter of speculation, whether the functions of the mind were also suspended or not; of

their continuance, as yet there had been scarcely any evidence; at the same time there were no grounds sufficiently conclusive of their temporary absence. During the fit, there was a complete semblance, to the view, of sound and healthy sleep; her sleep, however, differed considerably from natural repose; healthy sleep was that, consecutive of exhaustion, or the necessity for which was occasioned by extreme mental exertion; under ordinary circumstances, too, it was gradual in its approach. Morbid sleep, on the other hand, (under which cataleptic and epileptic sleep and somniation were included) was sudden in its seizure, and independent of previous exhaustion or periodical habit; the varieties of morbid sleep were again distinguishable from each other by the mode of resuscitation, the state of the muscular system, the presence or absence of mental phenomena, &c. Thus, in epilepsy, the fit departed gradually, and left the patient in a state of lethargy, or sopor; in catalepsy, the awaking was comparatively immediate, and during the fit the muscles were in the state of rigidity characteristic of the disease; in somniation, the awaking was also sudden, but the sleep was accompanied by speaking, singing, extravagant gesticulations, and other marks denoting the presence and activity of the mental functions. In this patient, therefore, the cataleptic state was indicated by the mode of awaking, the muscular rigidity, the insensibility during the paroxysm, and pain and external noise."

In reviewing the case, on the patient's discharge from the hospital, Dr. Duncan observed that the symptoms and character of the malady had considerably varied during the progress of the complaint. These variations he was inclined to refer rather to a "modified form of hysteria than to any other disease." As the case proceeded, the paroxysms became more and more accompanied by gesticulations, singing, praying, &c. instead of the rigidity of catalepsy. The form of hysteria approached the epileptic, as, in the paroxysms, the patient was totally de-

void of consciousness or feeling. The remedies which gave most relief in this case were those which are most useful in hysteria—antispasmodics, narcotics, and purgatives. The shower-bath had been employed two days after her admission, and apparently with some benefit at first; but subsequently with mischief. Powerful purgatives brought away pitchy stools, and temporary relief followed. Indeed, the purgation appeared more beneficial than any of the other remedial measures, till the new symptom of excruciating pain in the abdomen set in, when leeches were applied. This pain was so torturing, that the accession of the cataleptic paroxysm was desirable, as a temporary insensibility to sufferings. The cause of these sufferings Dr. D. was unable to explain—who, indeed, can hope to explain the mysteries of the nervous system in hysteria? One thing is certain, that depletion did not relieve this excruciating pain. Dr. D. alluded to those unaccountable tumours which sometimes shew themselves in hysterical females about the groins, causing great dread of hernia in the minds of medical attendants. He was convinced at any rate that these tumours were *internal*, or situated beneath the muscles constituting the abdominal parietes. In this case flatulence was very distressing. In one instance, after a fright, the spasms became actually tetanic, and lasted four hours, during which time, though the muscular system was in a state of cataleptic rigidity, she sang hymns and repeated the Lord's prayer in a perfectly rational manner. During the eruptive fever of the small-pox, the paroxysms went on; *but were suspended during the presence of the eruption itself.* This was a fortunate circumstance, as a continuance of struggles, during the eruption of pustules on the surface, would have been most distressing. The alcoholic extract of nux vomica was afterwards given in large doses, so as to induce a considerable degree of narcotism. From this time she gradually improved till she was discharged—but whether this improvement resulted from medication, or one of the freaks of the malady, it would be difficult to say. One thing is certain—that, in less than three weeks, she returned in statu

quo, and remains in the infirmary. We shall report on both the cases mentioned in this paper on a future occasion.

XXXVII.

ON INFLAMMATION OF THE CHOROID COAT.*

Our attention having been particularly drawn to a paper bearing the above title, from the pen of our former confrère, and a very able surgeon, Mr. Mackenzie, we were induced to con it over with care. The perusal justifying the encomia pronounced on it by our correspondent, we shall introduce it to a far wider circle of readers, than the original respectable journal in which it appeared can possibly obtain for it.

The situation and characters of the choroid coat, says Mr. Mackenzie, supply sufficient reasons for the inflammation which attacks its texture, having hitherto failed to attract attention or having bid defiance to precise elucidation. It is generally acknowledged that iritis is occasionally attended by inflammation of the choroid, but as the arteries of the parts are distinct in course and distribution, the idea of a separate choroiditis and iritis is, *a priori*, rendered probable.

"For some time, the separate existence of choroiditis was with me rather a matter of speculation, and a conclusion from analogy, than a fact ascertained by observation. I am now convinced, however, that the choroid is sometimes the seat, almost quite independently, of inflammation; that in certain cases of ophthalmia, it is the focus of the disease, and that the neighbouring parts may be as little affected when that is the case, as the sclerotica is in iritis, or the iris in sclerotiis. That it is of importance to distinguish the disease which I am now about to describe, will appear very evident, when we consider its dangerous na-

ture. Its symptoms, as we shall immediately see, are very different from those of any other ophthalmia; and although ultimately the whole eye may be involved by inflammation commencing in the choroid, yet choroiditis, in the early stage, exists without any signs of disease in the iris, and without any other effects upon the sclerotica and retina, than those which must necessarily arise from the pressure of an inflamed and swollen membrane, placed in contiguity with other membranes, more or less susceptible of suffering from that pressure. I consider choroiditis, therefore, as completely a primary and distinct disease."

SYMPTOMS. 1. *Discoloration of the White of the Eye.* From the pressure of the inflamed choroid the exterior tunics become extenuated, so that the dark choroid shewing through the sclerotica gives to it a blue or purplish hue. This is a very remarkable and early symptom, whilst the degree of discoloration varies with the severity and duration of the attack, and is best observed by comparing the healthy with the morbid eye.

2. *Tumour.* When the discoloration has existed for a time the affected part protrudes, commonly on one side only of the eye-ball near the cornea, as if the corpus ciliare was the seat of the disease, and most frequently at its superior or temporal side. The tumour may enlarge to the size of half a filbert or more, and is then generally of a deep blue, with varicose vessels running over it, a state to which the name of sclerotic staphyloma has been given. Several such tumours may surround the cornea.

"The front of the eye, however, is not the only seat of choroid staphyloma, as it might be called with more propriety than sclerotic, considering the actual origin of the protrusion. Scarpa, tells us that he had never met with any tumour or elevation of the sclerotica on its anterior surface, resembling a staphyloma; but that he had twice happened to meet, in the dead body, with staphyloma of the posterior hemisphere of the sclerotica.—The first time was in the eye of a woman of forty years of age. The eye was of an oval figure, and upon the whole, more volumi-

* Glasgow Journal, No. IX.

ous than the sound eye on the other side.— On the posterior hemisphere of the diseased eye, and to the external or temporal side of the entrance of the optic nerve, the sclerotica was elevated in the form of an oblong tumour, like a small nut. As the cornea was sound and pellucid, and the humours still preserved their natural transparency, on looking through the pupil, there appeared towards the bottom of the eye, an unusual brightness, produced by the light penetrating that part of the sclerotica, which had become thin and transparent where it was occupied by the staphyloma. When the eye was opened, the vitreous humour was found entirely disorganized, and converted into limpid water, and the chrySTALLINE lens somewhat yellowish, but not opaque. When the posterior hemisphere of the eye was immersed in spirit of wine, with a few drops of nitrous acid added to it, in order to give the retina consistence and opacity, it was distinctly perceived that there was a deficiency of the nervous expansion of the retina within the cavity of staphyloma; that the choroid was very thin at this part, deprived of its natural colour, and of its usual vascular network; and that the sclerotica, particularly at the apex of the staphyloma, was so thin as scarcely to equal the thickness of writing paper. The woman from whom this eye was taken, had lost the faculty of seeing on that side some years before, during an obstinate ophthalmia, attended with most severe, and almost habitual pains in the head.

Scarpa had an opportunity of making similar observations on an eye met with accidentally by Dr. Monteggia of Milan. It was taken from a woman, thirty-five years of age, was of an oval figure, and longer than its fellow. The staphyloma was situated exactly as in the former instance. The vitreous humour was dissolved; the chrySTALLINE capsule was distended by a thin whitish fluid; the lens yellowish, and less than natural, the retina deficient within the staphyloma; the choroid and sclerotica, forming the tumour, thinned, so as to transmit the light. Nothing positive could be ascertained regarding this woman's sight."

3. *Effusion between the Choroid and Retina.*

There can be no doubt that the vessels of the choroid are greatly enlarged in this disease, indeed our author remembers having seen a preparation in the hands of Professor Beer, in which the varices were as large as small peas. Frequently also there is an effusion of watery fluid, and sometimes coagulable lymph, between the choroid and retina; the former Mr. M. has often had occasion to evacuate with a needle. If this be not done, it accumulates to such a degree as to press the retina before it, and having occasioned the absorption of the vitreous humour, it gathers the retina into a cord, which looks, through the pupil, like a deep-seated cataract, or the advancing tumour in medullary fungus. The latter is still more closely counterfeited by the effusion of coagulable lymph between the choroid and retina. In one case such an effusion was occasioned by a penetrating wound of the eye, and the lymph lay in white masses, which remained unchanged so long as Mr. Mackenzie could watch the case. In another instance, however, the lymph has assumed a red colour, and pressed forward almost into contact with the cornea. The same appearances have been noticed by Mr. Travers.

4. *Redness.* The arteries of the distended sclerotica are much enlarged in choroiditis, and not unfrequently we observe a patch of redness near the edge of the cornea, fed by one or more of these dilated vessels. Sometimes the redness is confined to the upper part of the eye-ball; there is seldom any of the conjunctiva, but either it is sclerotic, or consists in an enlargement of the visible arteries derived from the recti muscles.

5. *Displacement of the Pupil.* "The iris is not affected with inflammation in choroiditis; but the pupil, in almost every case which I have witnessed, has undergone a remarkable change of place. The iris is always narrowed towards the portion of the

choroid which is affected, and in many instances, the pupil is observed to have moved so much out of its natural situation, as to be almost directly behind the edge of the cornea. Upwards, and upwards and outwards, are the directions in which the pupil is most frequently observed to become displaced. It occasionally continues small and moveable, in other cases it is immoveable, but not dilated; in very severe cases it is greatly enlarged, the iris having entirely disappeared at that part of its circumference towards which the displacement of the pupil has happened.

"The remarkable displacement of the pupil which attends choroiditis is owing probably to some affection of one or more of the ciliary or iridal nerves, which running forward between the sclerotica and choroid, pass through the annulus gangliformis, and ultimately reach the iris. This symptom has been remarked by Beer as an attendant on syphilitic iritis. That it is not a constant attendant is well known. I have seen it in other varieties of iritis. It has never been attributed to any affection of the choroid, nor has any explanation of its cause been offered.

"The pupil does not return to its place, even although the choroiditis is subdued."

6. *Opacity of the Cornea.* This is a frequent, though not necessary attendant on choroiditis, and generally it is the edge of the cornea nearest the portion of affected choroid that becomes opaque, whilst the rest remains perfectly clear. In other cases there are pretty extensive but irregular spots of whiteness, rather the effect of interrupted nutrition than of inflammation. In some severe and long-continued cases of choroiditis the cornea becomes almost entirely opaque, and even dilated and staphylomatous, when this alone may destroy the patient's vision.

7. *Exophthalmos and Exophthalmia.* "In consequence of choroiditis, the eye may enlarge, and even protrude from the orbit to a very considerable degree, without much inflammation of the sclerotica and conjunctiva, these tunics being merely thinned by the

pressure of the distended choroid. After a time, however, the eye in this state of exophthalmos, is apt to suffer from external inflammation, in consequence of being but imperfectly protected by the lids, or it may be, in consequence of cold or mechanical injury. When the inflammation, thus excited, runs to a great height, the conjunctiva becomes chemosed, puriform fluid is deposited behind the cornea, or between its lamellæ, the eye bursts, continues to swell and protrude still more, assumes a fungous appearance, bleeds profusely, and being productive of great pain and deformity, evidently requires to be extirpated."

8. *Intolerance of light and epiphora,* are generally considerable.

9. *Pain.* This varies much in different individuals. It is moderate when there is no protrusion; it becomes severe and sometimes furious, when the sclerotica is much pressed and distended, especially when this takes place suddenly, and is attended with considerable increase of redness. Hemispheralia is also present, affecting principally the top of the head, the high part of the temple, and the cheek. It is not strictly circumscribed, nor is it strikingly nocturnal.

10. "*Vision is variously affected in cases of choroiditis.* In some, the very first symptom complained of, is dimness of sight. Hemispheralia, all objects to one or other side of a perpendicular line, or above or below a horizontal line, appearing dim, all objects appearing confusedly, and as if double, even when viewed with one eye, are symptoms which not unfrequently distress the patient long before any redness or blueness of the eye is visible. If the disease goes on, we sometimes find that total blindness ensues, even when the choroid appears but partially affected; while in other cases the whole choroid is evidently affected, the whole eyeball enlarged and discoloured, and yet a considerable degree of vision is retained."

CONSTITUTIONAL SYMPTOMS. The subjects of this disease are adults, and those of strumous habit are most subject to it. Various degrees of febrile excitement attend it;

in the early stage the pulse is not affected, but after the patient has suffered much, an extremely cachectic state is apt to follow. The digestive organs are frequently much deranged from the very first, and continue to be so throughout the disease.

CAUSES. Mr. Mackenzie attributes the commencement of the disease to want of exercise; derangement of the digestive organs; over use of the eyes in reading, sewing, miniature-painting, and other minute works; exposure to too much heat and light, the glare of hot fires, vicissitudes of temperature; and finally, blows on the eye and penetrating wounds.

PROGNOSIS. Recovery is always slow. If the disease has gone to any considerable length, it is scarcely ever completely removed. The vestiges of it are in general permanent, even after it has been completely checked in its progress. In many cases, we may reckon ourselves fortunate, if we arrest this disease. Yet it sometimes happens that the cure proceeds to a degree beyond our expectation. I lately attended a gentleman who, many years before, had almost entirely lost the sight of the left eye from this disease. The right was now attacked. Both pupils were greatly displaced; the visible arteries of the right eye were much dilated, and the sclerotica at different places considerably extenuated; the left eye was enlarged, of a pretty deep blue colour, and a great part of the cornea opaque. By blood-letting, counter-irritation, and other remedies, the disease was arrested in the left eye, and very unexpectedly the right eye recovered to such a degree, that he was again able to read with it an ordinary type.

TREATMENT. 1. *Blood-letting.* Profuse and repeated blood-letting does more good in the early stage of choroiditis, than all other remedies put together. Yet we might perhaps not be tempted to bleed sufficiently at this period of the disease, from the circumstance that in many instances, there are

no external signs of intense inflammation, and the patient does not suffer any acute pain. The practitioner, therefore, who is not acquainted with the nature and symptoms of this ophthalmia, might be apt to trifle away time in the application of a few leeches, when he should be opening the temporal artery, and removing a large quantity of blood. I have known the blueness and evident distention of the sclerotica, which, notwithstanding leeching and other remedies, had continued unabated for many weeks, disappear suddenly and completely, after the loss of twenty or thirty ounces of blood from the temple. Bleeding from the jugular vein, or from the arm, is also highly useful. Twenty-four or more leeches round the eye, every second day, I have seen attended by the best effects. In chronic cases, we must not neglect the frequent and liberal application of leeches.

2. *Purgatives* are of essential service. The disordered state of the biliary and other digestive organs, indicates the use of calomel as a cholagogue, followed by salts and senna, or some other brisk purgative. Such remedies are to be repeated frequently, during the course of the treatment.

3. *Mercury.* We are naturally led to advise mercury in choroiditis, from observing its happy effects in iritis. But on the whole, I must confess, that in the former disease, I have not witnessed any remarkable benefit, either from making the mouth sore, or from small doses long continued. I have used this medicine both in friction to the head, and in various forms internally; but it has appeared inert so far as the choroiditis is concerned. Still, I have hitherto continued to prescribe mercury in this disease, because the cases which I have treated are too few to enable me to decide completely on this point, and because this medicine is found to do good in all other chronic inflammations of the eye.

4. *Turpentine* I have lately tried in one or two cases, but am unable as yet to come to any conclusion regarding its effects.

5. *Iodine.* In one case only have I fully

tried this powerful sorbefacient, and I am happy to say, with an amount of good effects altogether unlooked for. An eye which I had many times punctured, and had fairly made up my mind to extirpate, has shrunk considerably under the use of the tincture of iodine, while the sclerotica has assumed much more of its natural whiteness.

6. *Tonics*. After due depletion, I have seen much benefit accrue from the precipitated carbonate of iron, and the sulphate of quina. They may be given separately, or together.

7. *Counter-irritation* is decidedly useful.—A tartar emetic eruption between the shoulders is perhaps the most effectual.

8. *Paracentesis oculi*. Puncturing the sclerotica and choroid, so as to evacuate the aqueous fluid collected between the latter tunic and the retina, is a remedy of much importance in the treatment of this disease. It is not to be tried in the acute stage, at least I have not dared to try it except in the chronic stage, and when there was an evident tendency to staphyloma scleroticæ. The operation is performed with a broad cataract-needle, which is to be thrust, not in the direction of the lens, which it might readily wound and render opaque, but towards the centre of the vitreous humour. The instrument need not penetrate deeper than the eighth part of an inch. A little blood is usually discharged from the divided portion of the choroid, mixed with aqueous fluid of a slightly glutinous consistence. The operation gives great relief to the feeling of distention or pressure in the eye, and to the attendant headach. It may be repeated every eight days, or at longer intervals, according to the state of the eye.*

9. *Extirpation of the Eye* becomes necessary, when the organ is much protruded, and at the same time destroyed by inflam-

mation, or when organized lymphatic exudation within the eye, (a symptom over which paracentesis has no control,) goes to such a length that the tunics are kept constantly in a state of painful distention. The eye having fallen into either of these conditions, the general health of the patient is apt to suffer so much from continued irritation, want of sleep, inability to take exercise, and loss of appetite for food, that there can be no doubt of the propriety of removing a part which has become entirely unfit for its office, and remains only as a source of disturbance to the constitution."

This concludes Mr. Mackenzie's very able and instructive memoir on choroiditis. To say that we have analyzed it would be untrue, for it is written with so much brevity that small room was given us for further abbreviation. We strongly recommend its attentive perusal to our readers, and perhaps the most solid and most flattering compliment we can pay the worthy author, is the assurance that the transplantation of his paper to our pages, will introduce it into company and circles, with which it could not otherwise have formed so much as even a bowing acquaintance. An introduction in this case is all that can be wanted, because to be courted and admired, it only requires to be known.

XXXVIII.

LITHOTRITY.

THIS very interesting subject was brought before The Royal Society, in a communication from Mr. Costello. The Meeting on this occasion was the most crowded of any that took place this season. This gentleman, it is known, had been, till very lately, the associate of the Discoverer of Lithotritry, Dr. Civiale, of Paris. The paper commenced by some general reflections on the progress of this method in France, from which it would appear, that it had been already applied successfully in 200 cases.

* See a case of Staphyloma Scleroticæ successfully treated, by repeatedly tapping the Eye; by Richard Martland, M.D., in the Edinburgh Medical and Surgical Journal. Vol. xxiii. p. 59. Edin. 1825.

and that the French Institute had, from its very infancy, made every effort to cause it to be generally adopted. Mr. Costello was desirous to obtain for it the sanction of the Royal Society, and accordingly came forward with his *exposé*. This Paper was drawn up in such a manner as to exhibit the gradations of difficulty which the application of Lithotritry may encounter. Its divisions which we shall notice presently, were well calculated to answer the ends the author had in view; viz. To set bounds to the enthusiasm of those, who imagine that Lithotritry is applicable to every case of calculous affection; to enable practitioners in general to judge for themselves, as to its applicability in any given case; and lastly to convince those who have the misfortune to be afflicted with stone, of the necessity of applying for relief in time, the method being, in the early stage of the disease, attended with certain success, and with little or no pain.—To fulfil these views, Mr. Costello adopted a division of his subject, founded on the normal state of the organs in general and of the urinary organs in particular, and on their greater or less degree of aberration from that state. We thus have four classes of calculous cases; the first, which Mr. Costello denominates simple cases; the second in which there is commencing organic alterations; the third, in which the organic alterations, are profound; the fourth, in which these alterations are extensive, the general health destroyed, and the calculi are large, or numerous. In the first class, four cases are related in which calculus had existed variously from six to fifteen months.—The operation in these cases, is as brilliant as it is safe, and expeditious. Each of the patients is delivered of the stone, in one or two sittings, of from three to five minutes duration, and apparently with no more pain, than is usually produced by common sounding. In these cases, the calculus is of recent formation, the urinary organs are in the normal state, and the general health is unimpaired. The patients undergo no confinement during the treatment; a bath is merely ordered after the operation. When the sittings are to be repeated, they walk about in

the interval, and are in no wise affected by what has taken place, further than that the fragments of the stone are voided naturally in the urine. In one of these cases, the patient thinks so lightly of the pain occasioned by the operation, that at the time of the definitive exploration of the bladder, and when it is ascertained that it is quite free of any particle of stone, he exclaims, I have suffered a great deal, but now I shall cease to observe a regimen, for if my disease return, I can be rid of it in five minutes.—But unfortunately, says Mr. Costello, the application of Lithotritry does not always take place under such favourable circumstances; on the contrary, the alternative hitherto held out for the cure of stone, the knife, by deterring the majority of the sufferers from resorting to it, until the urinary organs became deeply diseased, and the calculi much larger, creates difficulties for the lithotritist, which all his skill and patience cannot sometimes surmount. When there is simply one, or more calculi of recent formation in the bladder, and the urinary organs are sound, the cure is certain and almost painless. The certainty and painlessness of the operation generally speaking, will be always relative to these conditions.

The interest which Sir Astly Cooper took in the propagation of Lithotritry, is mentioned in a very complimentary manner. This line of conduct, on the part of Sir A. Cooper, is in accordance, with the zeal he has always evinced for the advancement of science. One of the patients in the second class, in which Mr. Costello places cases in which there is commencing organic alteration, was operated on by him in Sir A. Cooper's drawing-room, in the presence of several eminent surgeons. This patient obtains his cure in three sittings of three or four minutes each, attended with very little pain, although his case presents three unfavourable circumstances, namely, a narrow urethra, an enlarged prostate, and a columnated and irritable bladder. After the operation, the patient "girds up his loins," and walks down stairs with Sir A. Cooper and the surgeons who had been present. He smiles, and is as merry as if he had been no

more concerned than any of the bystanders; on observing which, Sir Astley exclaims, "Really, gentlemen, all this appears to me quite extraordinary, it is unquestionably the most valuable improvement of modern surgery." In another case in this class, complications, equally, if not more serious, are triumphed over with the same facility. The relation of the case of Admiral Poulton proves this. Mr. Costello here makes some reflections on the high operation of lithotomy, which in his opinion in cases of large calculus bids fair to be more generally resorted to than it has hitherto been.

In the third class, we have various forms of extensive organic mischief, such as catarrh of the bladder, thickening of its substance, fungous growth within its cavity, enlarged prostate, irritability, paralysis of the bladder, incontinence of urine, &c. Even under these untoward circumstances, says Mr. Costello, lithotripsy will often succeed. But its application requires the greatest care and caution; and the lithotritist must rather feel his way, than precipitately rush upon the operation under such circumstances. Mr. C's plan, when the irritability is excessive and the health broken, consists in the free exhibition of opium, by the mouth or anus, the application of leeches to the perineum, followed by anodyne fomentations, and the use of the hip or general tepid bath. When the opium disagrees, he employs hyoscinus, conium, &c. To this are added dilution with mucilaginous drinks, a mild regimen and repose on a sofa; alkaline medicines are also employed. When the parts are quieted, he proceeds with the operation in the same manner, as if it were a simple case. In this series we find the case of Mr. Hall, of Dartford, in whom the capacity of the bladder is diminished, the prostate tumefied, the disease is of several years standing, and there is frequent testicular enlargement. The calculus is of the size of a large walnut, and requires seven sittings for its entire destruction and extraction. Mr. Hall was consulted by another gentleman, who subsequently became a patient of Mr. Costello.

He quieted his fears by assuring him, there was nothing very terrible in this operation, and that his life ran no risk by it. The gentleman who had been thus reassured by Mr. Hall, was Mr. Bowdery, a respectable bookseller, in Oxford-street. He was present at the Meeting of the Royal Society, and exhibited, in a tortoise-shell box, the calculus, reduced to powder, of which he had been delivered, he appeared to enjoy excellent health. Another case in this class, is that of Mr. Kearns, parish priest of Rathfarnham, near Dublin, aged 73. In this case the bladder was irritable, the prostate enormously enlarged, the bladder contained several calculi, and catheterism had been several times followed by the eruption of scorbutic blotches on the lower extremities. In the next case, there is thickening of the bladder, incontinence of urine, calculus in the bladder almost from infancy, (the patient being then 19 years old,) with extreme marasm. The next is the case of Mr. Bowdery, which exhibits in a striking manner, one of the most formidable complications of stone in the bladder, as well as the skill and tact by which the difficulties it presented were overcome.—The bladder contained several calculi, the prostate was enlarged, and there was a fungous growth at the neck of the bladder. Mr. Costello relates this case with great clearness and effect, and closes it by a few very sensible observations on the nature of fungous growths in the bladder in general. He also alludes to the influence which the pressure of his instruments exerts in effecting the resolution of those enlargements of the prostate, which so frequently accompany the advanced stages of calculous disease. It is true, he says, that we cannot determine *a priori* that this resolution will be effected; but it is quite certain that it will take place in a great number of cases, and that it will be favoured, as in other anormal enlargements of tissues, by previous local bleeding. The last case in this series is that of J. V. Batley, a young painter of considerable talent. Mr. Batley had laboured under symptoms of stone for ten years. The calculus had attained the size of a hen's egg,

the largest which Mr. Costello's instruments can grasp. There was intense catarrh of the bladder; notwithstanding these unfavourable circumstances, Mr. Costello was perfectly successful. The fourth class embraces cases in which the size, the number of the calculi, the constitutional disturbance, and the organic alteration, render the application of lithotripsy inadmissible.

The reading of this paper excited the deepest interest. Mr. Costello's object was to point out the cases favourable for lithotripsy, and at the same time the limits within which its application ought to be restrained. His plan was simple and intelligible, and in coming forward thus early, he will have essentially assisted the enquiries of the public and the procession on this very important operation. To us it is quite clear that, after the lapse of some years, when these complicated cases shall be less numerous, and less numerous they must become, because sufferers will now apply for the new remedy, on the earliest appearance of symptoms, lithotomy will be very rarely performed. Mr. Costello is an innovator; but he is so in an open, candid, and scientific manner. On this occasion the thanks of the Royal Society were voted to him for his valuable communication. He subsequently demonstrated the action of his instruments in the library of the Institution.

XXXIX.

HÆMORRHAGE IN CONSEQUENCE OF ULCERATION OR SLOUGHING OF THE THROAT.

Two of our contemporaries have published from time to time several cases of formidable, nay fatal, hæmorrhage, in consequence of ulceration of the throat. One rare case is of little importance, but when three or four of the same description are collated and compared, the subject assumes a commanding interest in the eyes of practical men. It has always been our object to act on this

plan, and whenever it was proper or practicable we have endeavoured to bring into one consistent group such scattered specimens of unfrequent diseases, as would fail to strike the eye when single and apart, or if noticed would be glanced at as merely matters of curiosity. This is certainly a troublesome proceeding for the writer, but a very instructive method for the reader, and in our case we can affirm that the advantage of the one is never weighed in the scale with the convenience of the other. The first case to which we shall direct attention is one published by Dr. Watson, the able professor of clinical medicine in the London University.

1. FATAL HÆMORRHAGE FROM CY- NANCHE TONSILLARIS.*

Case. Joseph Smith, æt. 26, a coachman, admitted into the Middlesex Hospital, Oct. 22, 1829, under the care of Dr. W.

"He complained of sore throat and inability to swallow. The external fauces were considerably swelled on both sides. He could open his mouth to a small extent only; and he was unable to protrude his tongue, which was large and furred. It was, therefore, impossible to obtain a satisfactory view of the back part of the mouth; but the tonsils could be indistinctly seen very red and large, and on the left tonsil a white speck was visible. His breath was peculiarly offensive, and he complained of an unpleasant taste in his mouth. The pulse was about 90. The bowels were confined. He said that the soreness of throat had come on in the evening, five days before. He had been more than once wet through, in the preceding week; had felt unwell, and had some shivering, a day or two before the throat became affected.

Twelve leeches were immediately applied to the outside of the throat, beneath the angles of the jaws. Five grains of calomel were given in the evening, and the 'haustus sennæ compositus' of the hospital pharmacopœia the next morning.

* Med. Gaz. No. 57, Jan. 3, 1829.

On the 23d the outward swelling was not apparently diminished, but he said that he had experienced great and immediate relief from the leeches, and the bowels had been freely purged. He was directed to use a myrrh gargle, and to take ʒj. of the sulphate of magnesia in ʒiss. of the compound infusion of roses, every eight hours. From this time to the 5th of November there was but little variation in the daily reports, and not much change had occurred in the local symptoms. There was still much swelling of the external fauces on each side, and the same difficulty existed of obtaining a fair view of the tonsils. The patient was still unable to move his tongue, or to separate his jaws to the width of more than half an inch. During this period he had occasionally felt an obscure sensation of throbbing in the throat, and he sometimes complained of pain shooting from the throat into both ears. He was much distressed throughout by the accumulation of viscid and ropy mucus in the fauces, and was almost continually, whilst awake, trying to hawk up the mucus. The same offensive fœtor was present: this was in some degree corrected by a gargle containing the chloruret of lime, in the proportion of 15 grains to the pint of distilled water. The bowels continued freely open; the pulse was a little above 100, and of moderate strength and fulness; the skin cool. Leeches were repeatedly applied to the throat, always with relief to his uneasy sensations there, but never with any decided influence upon the external swelling, which remained hard and somewhat tender. A blister to the left side of the neck, and poultices had also been applied, and the steam of warm water for some time diligently inhaled. No apparent benefit resulted from these measures. He obtained sleep and ease, after one or two very disturbed and restless nights, by the occasional exhibition, at bed-time, of half a grain of the acetate of morphia. He was able to swallow soft food."

On the 5th November, fluctuation being perceptible below the symphysis of the chin, a lancet puncture was made and much fetid

pus discharged. On the next day he could open his mouth better, and no ulceration of the tonsils could be detected. On the 7th, at 9, a. m. florid blood to the amount of 12 or 14 ounces was discharged from the mouth, and coagulated into a clot intermixed with some portions of a curdy whitish substance. Infusion of roses with sulphuric acid directed against the back part of the mouth with a syringe arrested the bleeding, and obscure fluctuation being felt externally in the lower part of the throat, a puncture was made and some horribly fetid pus let out. At half-past 9, p. m. the hæmorrhage recurred, and a pint or more of florid blood issued in a small stream. The patient could open his mouth so imperfectly that the fauces could not be "mopped" by a sponge dipped in alum solution, and the latter was therefore syringed in, when the hæmorrhage ceased. At half-past 4, a. m. of the 10th, two quarts of blood lost, when the patient became faint. Dr. Southey and Mr. Mayo saw the patient when the bleeding ceased, and it was found impossible to ascertain precisely from what part it had proceeded. The opening externally made by the lancet, was surrounded by a gangrenous appearance for a quarter of an inch on every side. It was supposed that the lingual or some branch of it was opened, but on which side or where the consultants could not tell. It was determined therefore not to tie a carotid on a speculation, but to support the strength by bark and quinine. On the 9th the hæmorrhage did not return, but a quantity of dark coagulated blood was discharged from the external opening at the lower part of the throat, between which and the bleeding spot internally, it was obvious a communication must exist. The gangrenous appearance had not spread. On the 10th a small slough separated, and a puriform discharge had taken place from the external wound. On the 11th, he was reported as doing well; pulse 108; skin warm. From this time till the 21st he continued slowly to gain strength, and he was allowed a small quantity of mutton chop. Soon, however, after taking this, which excited coughing when swallowed, the hæmorrhage returned to a trifling de-

gree, and at half-past 11, p. m. it recurred profusely, and did not cease till one or two pints of blood had been lost. At midnight Dr. Watson arrived and met Mr. Mayo in consultation. The patient was languid, chilly, weak, and pale, with a feeble pulse at 144;—a probe introduced into the wound passed towards the left side of the neck, on which the *os hyoides* could be felt quite denuded and rough. Mr. Joberns now joined the other gentlemen, and it was determined to tie the left carotid artery. In moving the patient for this purpose the hæmorrhage recurred afresh, and although Mr. Mayo was able, by introducing his finger into the wound, to compress the artery between his finger and thumb, the patient sank, became convulsed, and presently expired. The mode of death was by asphyxia and not by syncope.

"This conclusion, which the symptoms attending the act of dissolution had not left doubtful, was confirmed upon the examination of the body on the 23d, thirty-seven hours after death. The carotid artery had been previously injected, and its branches were filled with wax: these branches were severally traced. It was found that an abscess had existed, which opened internally behind and below the left tonsil, and nearly opposite to the epiglottis; through this outlet the bleeding into the mouth had taken place; the wall of the abscess where it opened internally was very thin. This abscess ran along the left side of the larynx, leaving the *os hyoides* rough and bare, and terminated externally by the opening already described, and which was made by the lancet. The facial and lingual branches of the carotid arose (as they are known frequently to do) by a common trunk. The lingual branch was traced to the situation of the abscess, where it terminated by an open mouth, about which the matter of the injection was found extravasated; on tracing the same artery beyond the abscess, it was seen to be quite empty. There could be no doubt that this was the artery from which the hæmorrhage had proceeded, and that it had been divided by ulcerations at the place

where the abscess was situated. On slitting up the trachea, bronchi, and their branches they were found to contain coagulated blood; there was a firm clot in the larynx; and another, composed partly of tenacious mucus, in which the coagulum of blood was mixed and entangled, remained at the summit of the fauces. The lungs were large and distended, and blood could be traced through many of the bronchial ramifications into the very air vesicles; this was more the case in some parts of the lungs than in others. A section of those parts where it was most evident presented just such appearances, but smaller and more numerous, as are seen in what Laennec has called 'pulmonary apoplexy.' On the external surface of the lungs, as is frequent in that disease, some well defined spots, of an uniformly dark colour, were visible; upon cutting into these they were found to have been produced by a sanguineous engorgement of the extreme vesicular branches of the air tubes, the boundary depending apparently on the extent of the lobules in the several cases. In some parts of the lungs this appearance did not exist—in those parts where it occurred, it was partial; blood had been forced to the extremities of some air tubes, and not of others. The blood in the blood-vessels was fluid, and escaped before the condition of the cavities of the heart, in regard to their contents, was ascertained. No vestige of ulceration could be perceived on either of the tonsils."

We have one remark to make on this interesting and really melancholy case, and that is an expression of something like surprise, at no medicine of astringent or styptic properties having been administered internally. Dr. Watson is well aware of the powers of the acetate of lead in checking hæmatemesis and hæmoptysis, and that too when the hæmorrhage is of a formidable character. Yet the acetate would appear to have been withheld altogether, nay it is not even mentioned, in the present instance. There is another remedy of a different character, which is undoubtedly possessed of considerable powers as an internal astrin-

gent, we mean the quack medicine which bears the name of the styptic of the Chevalier Ruspini. What it is we do not know, and as practical men we do not care, but we are certain that it is a valuable agent in arresting hæmorrhage. We have witnessed its powers on several occasions, and we have heard that in a severe case of hæmoptysis which lately occurred at St. George's Hospital, it proved effectual in stopping the discharge, after alum, acids, and the acetate of lead had failed. We are rather surprised that no medicine whatever of this class was exhibited by Dr. Watson in the present case, but we dare say he could offer a satisfactory explanation of the omission.

II. SLOUGHING OF THE THROAT—HÆMORRHAGE—SUCCESSFUL LIGATURE OF THE CAROTID.*

Case. This is detailed by Mr. Luke, of Broad Street Buildings, Surgeon to the London Hospital. The result was more fortunate than in the preceding case.

T. B. ætatis 45, a tall, rather muscular man, of sanguineous temperament, captain of a coasting vessel, trading between Cornwall and London, while in the former place, was stung by a wasp on the wrist, which became much inflamed, attended by a pustular eruption around the part. Livid red blotches, about three days after the sting, appeared on the trunk and extremities, with fever, neither of which created any alarm. With these upon him he went on board his vessel, bound to London. On his passage he had the misfortune to take cold, and was affected with sore throat, requiring confinement to his cabin. In a week he arrived in London, much worse, at which time he was visited by Mr. Gayton. The soreness, however increased, and the difficulty of swallowing was very considerable. He experienced much pain, particularly in the left side, where he was convinced a 'gathering had formed.' His opinion was confirmed on Sunday, Sept. 27th, by the bursting of an abscess,

with partial relief. Together with the matter he passed about six ounces of blood by the mouth. He was still sensible of another gathering lower in the throat than the first on the same side; and exhausted as he was by disease, he began to entertain apprehensions for his safety. On Sept. 29th he was brought on shore, and took up his residence with a friend in the neighbourhood of Mr. Luke's house. On the eve of this day, the second abscess burst, and shreds of slough came away with the matter: by this he was much relieved, and slept the greater part of the night.

"Sept. 30th, three weeks from the commencement of his illness, I was called to him about four o'clock in the morning, in consequence of his having lost a large quantity of blood. He had been awake by something flowing from his throat, which proved to be blood. When I arrived he had already lost about half a wash-hand basin full of blood; and shortly after he vomited more than two pints of coagula, making altogether between four and five pints lost in about half an hour. I found him in the greatest state of exhaustion; his pulse was scarcely perceptible and very rapid. There was extreme paleness of the lips; the eye sunk in the orbit; a clammy sweat upon the skin; inclination to vomit; and he could not speak louder than in whispers. On attempting to examine the throat, I could see nothing behind the soft palate, to which were adhering shreds of coagula. In a short time he began to revive, and his pulse became more perceptible. Ordered one grain of the acetate of lead, with a quarter of a grain of opium, every two hours; gonard lotion, with equal proportion of spirit, to be applied to the throat; the head to be elevated on a pillow, to be kept perfectly quiet, and abstain from swallowing as much as possible."

The faintness passed away, and at twelve o'clock he was much revived. He had an anodyne at night, and, next day, was much improved in appearance; the blotches were clearly those of the purpura hæmorrhagica.

* Med. Gaz. No. 106. Dec. 12, 1829.

Ordered to continue as before, with the addition of beef tea. On the third, at 4 p.m. Mr. Luke was again summoned on account of a return of the bleeding, which, however, had ceased before his arrival, the patient having lost, in a quarter of an hour, between three and four pints of blood. He did not appear much exhausted, but complained in a whisper of the left side of the os hyoides, as the seat of pain, and the spot from which he had felt the jet issue. To continue the lead with the addition of half a grain of powdered digitalis, every two hours.

"Oct. 4th.—At 4 a.m. bleeding again returned. From the account I received I expected to find my patient dying or dead. I found him in the greatest possible state of exhaustion; faint to nausea; the pulse with difficulty to be felt, and very rapid; the breathing laborious, and extreme paleness of the countenance. He was sensible, but apparently indifferent to surrounding objects. He had lost at this bleeding more than three pints of blood. It seemed almost certain that he must die. After a short time, however, he began to revive; the pulse became more distinct, and breathing more free, but the powers of life were so far reduced that another bleeding would inevitably prove fatal. I therefore determined to tie the carotid artery on the left side, that being the trunk which the circumstances of the case indicated to be the source of the bleeding vessel. To obtain the advantage of day-light, the captain was seated on a chair near a window. Before, however, he was arranged for the operation his face became convulsed, the pupils of his eyes dilated; his head fell upon his shoulders; and his pulse and respiration ceased. In this state he was hurried back to bed, with the impression upon my mind that he was past hope. A few minutes shewed that he had only fainted, and he soon revived. His head was then laid over a pillow at the foot of the bed, and as the room was dark, I was obliged to proceed by candle-light. An incision of about three inches through the skin, exposed the platysma hyoides, which was divided along the inner border of the sternomastoidous muscle. This being drawn to

one side exposed the omo-hyoidens crossing the sheath of the vessels, which was then cut through. The carotid could be very indistinctly felt pulsating in its sheath, into which last I made a small opening; a director was then introduced to detach the artery from the accompanying nerve and vein. This being done, a needle, armed with a double ligature, was carried around it from the outside, without bringing into view either the nerve or the vein. The ligatures were separated, and tied about half an inch apart, and the wound closed with plaster. On being questioned, he said he did not experience any unusual sensation when the ligature was drawn tight. His pulse was very weak, and beating 120 in a minute. The pupil of the left eye more dilated than the right. He was kept in the same position as during the operation, except that his head was not so much extended. Ordered beef-tea and light drinks."

No hæmorrhage took place till the 7th, when the wound was dressed, and found to adhere for half its extent. He had been feverish during the preceding night, and in the evening he spat up about an ounce and a half of saliva, tinged with blood. Salts and senna immediately—infusion of roses, with gr. xv. of Tr. Digital every six hours—syrup of poppies for the uneasiness of the throat. He passed a restless night, but was better next day; on examination, a slight fulness only could be seen on the left side; he swallowed with ease. Oct. 11th. Again fever and irritation of the throat; has spat up 2 ounces of blood; bowels confined. To repeat opening draught as occasion requires. He left off the digitalis on the 13th, in consequence of headache; the pupil of the left eye dilated, but vision as good as with the right. The bowels required to be kept regular, as fever otherwise ensued and a gum-boil, filled with congealed blood, formed over the incisor teeth. The ligatures were twisted, to expedite their separation. On the 26th October, the twenty-second day from their application, the ligatures were removed. After this day he went down stairs daily, and is now enabled to call on his friends and transact business. He has no

unusual sensation, but is weak and soon fatigued. Pulsation has returned in the arteries above the os hyoides, but not in the trunk between this bone and the site of the ligatures. The wound was not quite healed when he left town for the country.

III. HEMORRHAGE FROM AN ULCER IN THE FAUCES—SUCCESSFUL LIGATURE OF THE COMMON CAROTID ARTERY.*

Case. J. Webb, æt. 23, was admitted into the Middlesex Hospital on the evening of the 19th of October. Those who brought him stated, that he had suddenly lost a considerable quantity of blood from an ulcer in the fauces; but the hæmorrhage was now stopped, and no apprehension was entertained of its immediate return. At 9 a. m. next morning, the bleeding broke out afresh, but was stopped by the house-surgeon's making pressure on the carotid artery of the affected side. On Mr. Mayo's arrival at the Hospital, he found the patient pale, bloodless, and faint to the last degree.

"On examining the fauces, I saw a ragged clot of blood adhering to the right side of the pharynx, while the left tonsil and adjacent surface appeared clear and healthy. I proceeded, therefore, without loss of time, to tie the right common carotid in the middle of the neck. Scarcely a drop of blood flowed from the incision made for this purpose; the pulse in the artery, when it was exposed, was exceedingly feeble; the internal jugular vein lay shrunk and collapsed.

After the operation the patient several times fell into an alarming state of faintness; but having taken some brandy, some Spiritus Ammonię Aromaticus in water, and some strong and spiced broth, he gradually rallied.

A few minutes after the artery was tied, I inquired of this patient whether he saw equally well with both eyes. He closed his eyes alternately, to ascertain the fact; and remarked, that his vision with the right eye

was dim and obscure, while he saw distinctly with the left. At this time I could perceive no pulse in the right temporal artery. During the afternoon, distinctness of vision with the right eye returned; at the same time the pulsation of the right facial artery could be felt, though it was much less forcible than that of the left. The patient stated that he felt considerable throbbing in the left side of the head. He dozed much during the day, and slept well the following night.

The next morning an attempt was made to learn the history of his indisposition. The account which he then gave, however, and has since repeated, is very imperfect. He states that, for the last four months, he has had a sore throat; that, three months ago, spots broke out upon his chest and legs; that he took pills for these complaints during the space of three weeks, and that his mouth was affected about a fortnight; that, under this treatment, the spots upon his chest went away; that, for the last six weeks, he has taken no medicine, but has used a gargle; and that his throat he has latterly conceived to be getting better. The spots on the legs and thighs have left superficial ulcers, (which, when they were shown for the first time some days after his admission, were healing.) He states that he had a gonorrhœa a year ago; sores on the private parts never."

On the 20th, the following was the appearance of the throat:—the right margin of the uvula and edge of the right side of the soft palate were in a state of ulceration; the right tonsil was entirely destroyed with the posterior arch of the palate; the right side and posterior surface of the pharynx were ulcerated and covered with viscid puriform secretion; and at one part a portion of ashy slough adhered to the surface. Bark and acid with a chloride of lime gargle were prescribed, but no material change taking place, the cinnabar fumigation was directed on the 31st. On the following day the whole of the ulcerated surface was covered with florid granulations. On the 3d Nov. the 15th day after the operation, the

* Med. and Phys. Journal, Dec. 1829.

ligature came away from the artery, and the ulcer of the pharynx had begun to cicatrize. On the 16th the right side of the pharynx and palate had cicatrized. The ulcer which remained at the back of the pharynx was an inch in length, half an inch in breadth, yellow, and at one part deeply excavated.—Blue pill internally, and a mercurial ointment to the ulcer were employed, healing went on rapidly, and on the 22d Nov., the last date of report, there was every reason to believe that a few days more would complete the cicatrization.

“Till the ulcer in the throat assumed a healthy appearance, I felt considerable anxiety lest the hemorrhage should return; and I regretted that, instead of tying the common carotid, I had not tied the internal and external carotids separately at their origin. This operation (which, if I were again called to a similar case, I should probably adopt,) is calculated to give the patient an additional security against a recurrence of hemorrhage; inasmuch as it would cut off, not merely the *direct flow* of blood upon the ulcerated artery, but also the *principal anastomotic supply*.

In these remarks, I take it for granted that the hemorrhage in the case described proceeded from a branch of the *external* carotid. They would not, it is evident, apply if the ulcerated vessel were the *internal* carotid: in that case, it is to be feared that nothing would save the patient.

In the present instance, I am inclined to suppose that the ulcerated artery was the *lingual*, for the following reasons: 1. The patient tells me that the soreness in his throat, which he latterly experienced, seemed to him deeply seated within the angle of the jaw; and thus referred to the exact situation of the lingual artery, which as regards the cavity of the fauces, is singularly exposed and superficial at this part. 2. In a case attended by Dr. Watson, in some respects very parallel to Webb's where the patient died through hemorrhage into the fauces from ulceration, the artery which bled was proved, by dissection, to be the *lingual* artery.”

Cases similar to the preceding are of rare occurrence. In some the first hemorrhage is fatal; in others, the ulcerated artery, having bled for a time, spontaneously closes, and the bleeding does not recur: in others, the patient is carried off by a return of hemorrhage. In the case of Webb, there can be little doubt that the latter result would have ensued if the artery had not been tied. I believe the case to be the first of the kind in which this operation has been performed: it is extremely gratifying to me to have to state that the practice has proved successful.”

The successful issue of the case is a flattering panegyric on the bold and decisive operation performed by Mr. Mayo. But we have the same remark to make on the treatment which we made on that adopted in the case of Dr. Watson, and we cannot but regret that none of the usual medicinal means employed for checking hemorrhage, were resorted to previous to the use of the knife. The patient was in the house for nearly, if not quite, twelve hours before a recurrence of the bleeding took place, and during that time the employment of the acetate of lead, &c. would have done no harm, but possibly might have been productive of good. These observations can hardly apply to Mr. Mayo, for the patient was admitted at a late hour in the evening, and probably was not seen by Mr. M. till the next morning's catastrophe, which required more prompt and energetic measures.

IV. HÆMORRHAGE FROM SLOUGHING ULCERS IN THE THROAT SUCCESSFULLY TREATED WITHOUT AN OPERATION.*

Case. Wm. Stennet was admitted into Lazarus's ward, Bartholomew's Hospital, Oct. 9th, 1829, in a very debilitated state, with a large sloughing ulcer occupying the whole of the back of the fauces, and extending to the edges of the soft palate and uvula.

* London Med. Gaz. No. 113, Jan 30th, 1830.

He stated that at the latter end of April he was affected with an ulcer on the inner membrane of the prepuce, near its junction with the corona glandis. The sore was not excavated, but notwithstanding was very red and hard at its base. He took some mercury, and the sore skinned over without his mouth being affected. About the end of July a bubo appeared in each groin, which suppurated and burst spontaneously. On the 27th of Sept. his throat became sore, and gradually got worse until he was admitted into the hospital. At this time there was an open sinus in the groin; the cicatrix of the original sore was hardened; and, in addition to his sore throat, there were several dark-coloured tubercular eruptions on his forehead. He was in so weak a state that mercury was not at first resorted to. He was ordered a very strong preparation of the red Jamaica sarsaparilla three times a day, and the throat was painted over with the linimentum æuginis. He was also directed frequently to wash the throat by throwing a stream of water from an elastic gum-bottle upon the ulcer, while he held his mouth open over a basin—a simple plan of cleansing a throat, which has been found far more efficacious than gargling.

On the 21st, as he did not appear to gain any ground, and the sloughs were deeper and very extensive, and his stomach rejected the sarsaparilla, he was ordered Quinæ Sulph. gr. ij. ter die ex infus. rosæ. Vinî. Rubr. Oas. quotidie, and a strong solution of Nitrate of Silver was applied to the throat.

23d.—His general health was improved, but the sloughing still extended. He was ordered to fumigate with cinnabar night and morning. The second application produced such violent bronchial irritation that it was necessary to bleed him, and to desist from the fumigation.

By the 27th he had recovered from the bronchial affection, and his throat was much cleaner. The pure nitrate of silver was applied over the surface; milk and arrow-root diet, and sarsaparilla, were again resorted to, and he was removed into a clean ward. His general health improved, his throat be-

gan to granulate, and he was apparently going on well until the 25th of Nov. when the remaining portion of the uvula sloughed away, and the whole of the fauces again assumed a very threatening aspect. As the local application of the mercury had before benefitted it, the lotio flava was directed to be applied to the throat; and he was ordered to take Hydr. Oxymer. gr. $\frac{1}{2}$ ter die.

"On the 4th of Dec. as the throat was not improved, he was again ordered to employ the fumigation, with greater precaution than on the former occasion. During the night he felt a peculiar sensation in his throat, requiring him frequently to swallow. At 4, a. m. he vomited up nearly three pints of blood, and became alarmingly faint. The house-surgeon, Mr. Chapman, was sent for, who ordered him Plumbi. Acet. gr. j. Opîi. gr. ss. 4tis horis, and directed him to take every thing quite cold. The bleeding did not recur before I visited him at half-past 12. He was then in a most alarming state; his pulse so feeble that it could hardly be distinguished; and his whole body bathed in a cold clammy sweat. It was quite obvious that a recurrence of bleeding must prove speedily fatal. I had just heard of Mr. Mayo's successful operation, and should have been disposed to give the patient the chance of success from the same means, but it was quite impossible to determine from which side the bleeding took place, so very extensive was the sloughing in every direction. Under these circumstances he was directed to take Alum. gr. x. ex Inf. Rosæ. 3iss. c. acid. Sulph. dilut. ʒj. x. et Træ. Opîi. ʒj. v. 4tis horis. He was kept in a state of the greatest quietude; fed entirely on iced fruits and milk; and most narrowly watched. Without detaining your readers with too minute a detail of the case, suffice it to say, no return of bleeding took place. In a week he was much recovered in his strength, though very feeble. As the throat was still in a very bad state, and the sores on his head were spreading, the nurse was desired to rub Ung. Hyd. fort. 5j. night and morning, into the axilla. The mercury speedily began to have a most beneficial effect; the sores gradually improved, and

are now nearly healed; his strength and general health have also improved in proportion. He has since left off the mercury, and has resumed the sarsaparilla."

Mr. Earle, under whose care the preceding case turned out so happily has added some observations that are worthy of attention. They certainly conspire with the issue of this case and of another to which Mr. Earle alludes, to support the suggestions we have offered.

"I have stated that I should have been induced to have tied the trunk of the lingual, or the external and internal carotids, in this case, if it could have been clearly ascertained from which side the bleeding took place. I need hardly add, that if such an operation had been performed, and the patient had recovered, it is probable that the recovery would have been attributed to the employment of the ligature. It is on this account that I think it due to the profession to publish the case; at the same time I wish it to be distinctly understood that I do not pretend to offer an opinion respecting Mr. Mayo's or Mr. Luke's cases. I am desirous of taking this opportunity of concurring in opinion with Mr. Mayo in the propriety of tying the external and internal carotids separately in all such cases as may require the ligature of these vessels; but I should prefer tying the trunk of the lingual where such an operation could be effected. In Mr. Luke's case it is obvious that the circulation continued through the bleeding vessel, as several slight returns of arterial hæmorrhage took place. It is probable that in this case, if the force of the heart and arteries had been greater, the operation would have failed, from the collateral circulation.

A case in every respect similar to Stennett occurred in Sewell's ward in the autumn of 1828. In this case a young, very delicate female, had repeatedly extensive hæmorrhage from foul ulcers occupying the whole fæces. The bleeding was successfully arrested by the same means as were employed in Stennett's case—namely, large doses of Sulph. Aluminis in infus. Rosæ, and feeding the patient on iced milk and fruits."

By the way, neither Mr. Earle nor Mr.

Luke have alluded to another very powerful measure in arresting hæmorrhage, we allude to venesection. If a patient were swooning or sinking from violent bleeding, no one would of course be so mad as to open a vein in his arm, but generally the fatal loss of blood is preceded by several slighter ones, and that is the time for moderate bleeding from the arm, aided by acids or astringents, cool air, cool drinks, position, local pressure, and the other items of the anti-hæmorrhagic regimen. If these fail, the surgeon has the cases of Mr. Mayo and Mr. Luke, as precedents to guide him. The subject is very interesting, and the facts we have now brought together are calculated to be instructive.

XL.

MEDICAL SOCIETIES—REPORTING.

No impression, however keen, no sensation, however vivid, can last longer than nine days in the public mind—not even in the grave and sad mind of physic. We have a very recent instance in illustration. We were informed, by a most veracious cotemporary, that an "intense excitement" existed in the professional public on the 15th of April last, respecting the "great public dinner" to Mr. Handey. We think, on reflection, that this must have been the fact—for so intense was the excitement, that it destroyed all appetite before the first of May—and that profession which, according to our cotemporary, was in a complete state of *effervescence* in the middle of the month, became as vapid as stale infusion of senna, before the end of the same month! This is the case with all fervid emotions of the mind, whether in individuals or societies. They cannot last long—like the Irishman's love, they would "burn through the clothes," if they existed beyond the ninth day. Our good friend Wakley should have been aware

of this, and not set the profession in a flaming state of excitement for a "great public dinner," fourteen days before the beef was put on the spit! How could he suppose that John Bull's patience would last out such a time, when the pleasure of eating was in view? The "*ensuing Autumn*," however, will make up for all disappointments; and, as the town is then generally in the country, there will be plenty of room in the Freemason's Tavern for the "great public dinner" during the dog-days.

This reminds us of another "intense excitement" that was kindled up, not long ago, respecting reports from the different medical societies. The system of reporting was to introduce a new era in medical science—to diffuse the knowledge and talents of the metropolitan lions among the humblest members of the profession—to call forth modest and pining merit from the darkest "holes and corners" of our London lanes and alleys—and, in short, to foster talent and to check pretension wherever they were found! These fond speculations have not succeeded. From whatever cause, the fact is, that the attendance on medical societies, in the metropolis, never was at a lower ebb than during the session just terminated. The first effect of reporting was, to call forth a host of candidates for the honour of appearing in PRINT—and especially those who, of all others, were least capable of affording useful information to the members of societies or the public at large. The next and natural effect was, a cessation of attendance on the part of those who were most likely to render discussions interesting or useful; and the third consequence was, a disappointment of those splendid results of "REPORTING," which the "REPORTERS" of sanguine temperaments had anticipated. Our readers must have seen that the reports of the last session exhibited a sad falling off, and were little more than professional puffs which had outlived their ingenuity and died a natural death.

Our attention was drawn to the subject by reading, in the last Number of our Glasgow cotemporary, certain stormy proceed-

ings in the medical society of that flourishing city, respecting the propriety of "REPORTING" their proceedings. It appears that our cotemporary has got into a scrape by following the routine of the day, and attempting to fix or freeze the wordy thoughts of the Glasgow lions, and thus to give them "a local habitation and a name." The members of the northern congregation do not at all assimilate with those of the south. So far from fighting for publicity, and going on their bended knees to REPORTERS, to beg for a niche in the TEMPLE of FAME, they are said to have viewed, "with feelings of indignation and astonishment," the attempt that was laudably made by our cotemporary to transmit their names to posterity.

"It was then stated, 'with feelings of indignation and astonishment,' that a gross breach of confidence had been committed by some member or members; that the laws had been violated; that the Society had been betrayed, and was about to be utterly ruined; in a word, that the Proceedings of the Society had been reported in the Glasgow Medical Journal, an unprincipled publication, *not a whit better than the Lancet*."

Now we must declare that this last insinuation is utterly devoid of foundation. We have regularly perused the pages of the Glasgow Journal, from its commencement, and we never saw any thing like illiberality or party-feeling in its columns. Indeed it formed a complete contrast to the LANCET, with which it is compared on this point; and, therefore, we cannot but suspect that the above declaration was founded on those very *personal feelings and motives* which are decried in the proceedings of the society. In the course of an angry discussion on the subject of "REPORTING," our cotemporary affirms that a final majority was in favour of the measure; and, consequently, that the Editors of the Glasgow Journal might have fairly and honourably pursued the course which they commenced. But, unlike some of their cotemporaries, they have modestly deferred to the *minority*—and chose to sacrifice their own interests, and even what they

conceive to be the interests of the profession, rather than offend the feelings of any members of the society. This procedure alone is a proof of the falsity of the parallel which was attempted to be drawn between the Glasgow Journal and the Lancet. We wish we could verify, *to the full extent*, the following flattering picture of medical societies in general.

"An assemblage of medical men, however, is of all others the least apt to be led away by mere declamation. Habituated, by daily practice, to the command of their feelings, and to seek, even in the most perplexing circumstances, for some sure principle on which to rest their conclusions, their minds acquire a hardihood, which renders them little susceptible of momentary excitement, and a decision, which enables them to view every question in its pure practical bearings, and form their judgment without regard to extrinsic considerations."

We believe that, upon all important occasions, when the judgment as well as the feelings of medical societies are fully called forth, the foregoing results will obtain. But we have had too much knowledge of the world, and of medical societies, to acquiesce, *to the full extent*, in the foregoing proposition. In the cold regions of the North, it may be as our Glasgow cotemporary represents it. But, whether it be owing to the brilliancy of the skies, or the heat of the gas, in modern Babylon, it so happens that the judgment is not *always* formed "without regard to extrinsic considerations." We respect the feelings which dictated the following passage, and the resolution therein promulgated, though the sentiments will scarcely bear the scrutiny of rigid and cold philosophy.

"The Glasgow Medical Society consists of individuals, not merely related as members of a medical association, but related still more intimately by friendship, kindred pursuits, and habitual intercourse. The relations of the latter kind we value still more highly than those of the former, and should be sorry to infringe them. Having ascertained, then, that the publication of the reports of the Society is obnoxious to several

Gentlemen, whose opinions we respect, even while we differ from them, we, for that reason, abandon our proposed plan. We repeat, however, that we abandon it, solely, from motives of private feeling."

Whoever, after the above declaration, pronounces the Glasgow Journal to be "an unprincipled publication, not a *whit* better than the Lancet," must be totally incapable of distinguishing light from darkness. Indeed, we conceive that our brother editors of the north have carried their delicacy even too far; for, after a majority of a society had determined the *right* of publishing their transactions, there could be no violation of propriety or delicacy in giving a fair and correct exposition of their proceedings. We begin, however, to doubt very much the ultimate utility of these reportings, since they draw with them a host of evils when the medical press is corrupted by party feelings, and, consequently incapable of giving a fair representation of the facts or opinions broached in a society. By this procedure all well authenticated cases of much interest are necessarily held back, for fear of exposure to the eyes of relations or friends in the public newspapers—for which vehicles matters are now-a-days *got up* in medical journals, and not at all for professional perusal.

XLII.

PROSPECTUS OF THE "METROPOLITAN SOCIETY OF GENERAL PRACTITIONERS IN MEDICINE AND SURGERY."

GENERAL PRACTITIONERS.

A SOCIETY has been formed, which is entitled, "THE METROPOLITAN SOCIETY OF GENERAL PRACTITIONERS IN MEDICINE AND SURGERY," and is intended as an union of the Practitioners of this class throughout England and Wales for the protection of their mutual and individual interests; having the following objects in view:—

1st. Such alteration of existing laws and customs as shall promote the prosperity and respectability of the general body of Practitioners.

2nd. The adoption of such measures as may be conducive to the advancement of medical science and of professional information.

3rd. The periodical assemblage of the members for literary and scientific discussion—for the cultivation of social intercourse, and for the consideration of general measures relative to the Society.

4th. The creation of a fund to be appropriated to the protection of the Members, and for the general exigencies of the Society.

5th. The establishment of a *benevolent* fund, by contributions from Members of the Profession at large and other charitable persons, for the relief of distressed medical men and their families.

The limits of a prospectus will not allow of a full detail of the objects contemplated; but it may be observed, in addition to the foregoing general statement, that it is intended, as soon as practicable, to effect some regulation respecting the mode of professional compensation; and, if necessary, to procure a legislative enactment to authorise the General Practitioner to make a fair and open charge for his services. It is also intended to protect individually those Members who may become involved in questions which may be considered by the Committee to affect the interests of the Society as a body.

Notwithstanding that there are numerous charitable funds for relieving distressed members of particular branches of the Medical profession, it is found that there are many Members of that Profession who are not objects of relief from any of those funds; and it is, therefore, to supply this desideratum, that the Plan of a General Benevolent Fund has been adopted, the application of which, it is intended, *should not be confined to this Society exclusively*; but should be extended, at the discretion of the Committee, to every Member of the Profession.

The affairs of the Society are under the management of a President, Vice-President, and a Committee.

A House, or Chambers, will be engaged,

as early as possible, for the use of the Society.

The Society will meet at such stated periods, and in such manner, as will be hereafter determined.

The foregoing is a brief statement of the views of the Founders of this Society, and from the advantages intended from its institution, the Plan of which may be enlarged, or curtailed, according to the support it may receive.

The Committee of Management entertain a confident hope that the Society will be of great utility to the general body of Practitioners, whose attention to this subject is earnestly recommended.

WILLIAM GAITSKELL, *President*.

It is requested that all applications and communications be made and addressed (post paid) to Mr. W. SENHOUSE GAITSKELL, Solicitor, 21, Stamford Street, Blackfriars.

XLII.

DIVISION OF THE SUBMAXILLARY AND OTHER NERVES.

To the Editor of the Medico-Chirurgical Review, London.

Sir,—I observe in your fasciculus for February last, the description of an operation performed by Dr. Warren, for excision of the submaxillary nerve, extracted from the Boston Medical and Surgical Journal. This mode of operating appears truly formidable, and is probably that which the late Dr. Haighton had in view, when he pronounced the division of this nerve impracticable.

A much simpler, safer, and easier mode of accomplishing the division of this nerve, where it enters the canal of the inferior maxillary bone, is, to make an incision, with a scalpel, from within the mouth to the extent of an inch, through the mucous membrane and cellular tissue connecting the pterygoideus internus muscle, to the ramus of the bone, parallel and close to the inner or mesial surface of the coronoid process immediately behind the dens sapientiae; then to take a round-shaped gum lancet and carry it backwards in a line continuous with the crowns of the molar teeth, having

the cutting edge at right angles to the bone, and divide the nerve on the bone. The pain experienced on the division of the nerve, at once, indicates that the proper organ has been cut. As the internal maxillary artery ascends to the bulbous process of the superior maxillary bone, it cannot be wounded, excepting through ignorance or carelessness; but, even if it were, a piece of dry sponge might be easily inserted to stem the hæmorrhage. The gustatory branch of the nerve could scarcely be injured. The dental artery must be wounded, but this is so small as to be of no moment, and, if morbidly enlarged, dry sponge would compress it. I have now performed this operation on four patients for neuralgia of the mental nerve, with perfect success, having previously attended to the chylopoietic viscera, and then tried the various antispasmodics and subcarbonate of iron; also the different counter-irritants, even the moxa, and lastly, the division of the nerve as it emerges at the mental foramen. Or, according to your own showing—"after the local symptoms from morbid associations or change of structure, had continued after the constitutional derangement from which they originally emanated, had been rectified—and the consequence had survived the cause." My first case was published in the *Edinburgh Medical and Surgical Journal* for October, 1821.

Thus there would appear to be a material difference between the division of the trunk of a nerve, where it is protected from the vicissitudes of atmospherical influence by muscular and other soft coverings, and the division of the same nerve, where it is exposed to the alternations of the weather, as far as relates to the permanent salutary result. It is well known, that in neuroma supervening to amputation, the excision of the tumour or tumours, proves a more permanent or radical cure than a secondary amputation, also in neuralgia following the same operation, excision of the nerves does the same, and evidently in consequence of excision preventing the interesting junction of the nerves, as well as the production of the numerous delicate filaments supplying

the cicatrix of the stump. This has been satisfactorily described by Larrey in his late valuable work '*Clinique Chirurgicale*,' and also by Descot, in his interesting '*Dissertation sur les Affections Locales des Nerfs*.' For the same reasons, the excision of a portion of a nerve must be a more effectual cure than simple division of the same.

If this view of the operative department of the pathology of nerves be found to be correct, it would follow, that the division of the infra-orbitary nerve, where it enters the osseous canal in the floor of the orbit, would prove more availing, than its division at the infra-orbitary foramen on the cheek.

This might be easily accomplished as follows:—let an incision about an inch long, of a curvilinear figure, to correspond with the circular shape of the orbit, be made at the outer canthus of the eye, the centre of which shall be opposite the outer commissure or angle of the eyelids, or rather the superior margin of the zygoma. This incision is to be deepened by cutting close to the osseous wall of the orbit, until the instrument reach the spheno-maxillary fissure, when it is to be laid aside, and a round shaped gun lancet inserted in the wound with its cutting edge at right angles to the floor of the orbit, and the nerve divided as it runs in the osseous channel. In some, this is an open, while in others, it is a shut or entire canal; but, in all, the parietes are so delicate as to be easily cut across. A portion of the infra-orbitary nerve, at its emergence from the infra-orbitary foramen, could not be removed, in consequence of its division into so many minute filaments: neither could this be accomplished within the orbit.

The supra-orbitary or frontal nerve may be also divided within the orbit, nearly an inch from the superciliary ridge, by first ascertaining the superciliary foramen or notch, which is done by drawing a perpendicular line from the second bicuspid at right angles to the area of the crowns of the teeth; secondly, by making an incision about the fourth of an inch parallel and close to the

superciliary ridge at the foramen, through the integuments, orbicularis palpebrarum muscle, and ligament of the superior tarsus; thirdly, substituting for the straight bistoury or scalpel, a probe-pointed bistoury, which is to be inserted deep in the orbit close to the bone, and with which the nerve is to be divided by cutting upwards on the bone, in the direction from the inner to the outer canthus, carefully guarding against injuring the superior oblique muscle on its inner or mesial aspect. A portion of this nerve may be excised either within or without the or-

bit: within, as just directed, combined with searching for the nerve at the superciliary foramen, and after its division seizing hold of it with the dissecting forceps and removing the insulated or detached part. As it sends off minute filaments on its emergence from the orbit, the removal of a portion without the cavity, would not hold out a prospect of so permanent a cure.

JOHN LIZARS.

Edinburgh, 34, North Place.

24th April, 1830.

CLINICAL REVIEW.

XLIII.

EDINBURGH SURGICAL HOSPITAL.*

EXCISION OF JOINTS.

SINCE November 1828, when Mr. Syme cut out a carious elbow, which he complacently remarks, "was the first time the operation was ever performed in Great Britain," he has operated in six other cases. Five of these seven cases have already been recorded in our respected Northern contemporary, and Mr. S. now furnishes the remaining two, of which we shall place an account before our readers.

Case 1. "Elizabeth Johnston, æt. 15, from Falkirk, entered the Hospital on the 26th of August, on account of a disease of the right elbow-joint, which had existed for six months, commenced spontaneously, and increased progressively, notwithstanding the efforts of her medical attendants. It now presented a most formidable appearance, the joint being so much swelled as to measure thirteen inches in circumference, and the arm above being reduced to little more than skin and bone, which made the enlargement seem even greater than it really was. The skin over the olecranon was extensively ul-

cerated, and at different places, both on the front and back parts of the joint, the probe could be passed into sinuses which extended to the bones. The limb was straight, and nearly immoveable. The discharge was profuse, the pain unceasing, and the irritation so great that the patient's health seemed rapidly sinking. It was plainly necessary to do something effectual for her relief, and both Dr. Ballingall and I, though entertaining the most favourable opinion of excision, from what we had seen of its good effects, resolved that any operation short of amputation would be inexpedient in this case, where there was such extensive disease not only of the bones, but also of the soft parts. Being, however, very averse in general to amputating the arm for caries, and feeling particular reluctance to mutilate this unfortunate girl, who was distinguished by the most amiable disposition and interesting appearance, I delayed the operation. In the course of ten days, whether it was owing to a real improvement proceeding from the free vent which had been afforded to the matter by incisions, or was merely the effect of familiarity with the appearance of the joint, I fancied that it was not so hopeless as at first believed, and resolved to make an attempt at excision.

The operation was performed in the manner formerly described, and was attended with very little difficulty, owing to the separation of the surrounding soft parts from the

* Edinh. Med. and Surg. Journal, No. CIII.

articulating bones, which had been caused by collections of matter. The olecranon was greatly expanded, and, if I may use the expression, completely rotten, so that it crumbled into fragments, which were extracted piecemeal. The radius adhered to the humerus, and was extracted along with it. Before dressing the wound, I observed that the ulnar nerve was partially divided by an oblique incision, and therefore cut it completely across, to avoid the danger of such a wound; and its extremities being then placed in contact, the integuments were stitched together. The patient did extremely well; the wound healed most kindly; the swelling of the joint subsided; she gradually regained its use; and is now, I am happy to understand, restored to perfect health. For some time after the operation, she complained of coldness and numbness in the ulnar side of the hand, but in process of time got rid of these unpleasant symptoms, probably in consequence of re-union, between the extremities of the nerve."

Case 2. James Page, æt. 8, was admitted on the 2d of January, as a proper subject for excision of the right elbow-joint, which was much enlarged, discoloured, and stiff, with two sinuses opening on each side of the triceps, through which a probe could be passed to the bone. The operation was performed in the ordinary way on the 12th January, the wound healed kindly, and the patient is nearly ready to leave the hospital.

In the case of a lad at present in the house the operation is only delayed till the parents' consent is obtained. In another case, in which the olecranon appeared to be extensively affected with superficial caries, the bone was exposed by Mr. Syme, and the softened portion removed with a gouge; the wound is now nearly healed and the patient makes no complaint. So much for excision of the elbow-joint, and we next proceed to that of the knee. Let us hear what Mr. Syme has to say upon the subject.

"The knee-joint, so far as regards its structure, is an equally favourable subject for excision with the elbow, since there is

only one articulation concerned in the disease or affected by the operation, and not a number, as is the case in the wrist or ankle. But the advantages from the operation in this situation are much more questionable than in the shoulder or elbow, since not only is there much less difference between the utility of a natural leg and a wooden one, than between that of a real and artificial arm, but doubts may even be entertained as to the probability of deriving any assistance in progressive motion from the limb, which is preserved by cutting out the knee-joint. With the exception of the two cases operated upon by Mr. Park of Liverpool, nearly fifty years ago, and the two cases lately published by Mr. Crampton of Dublin, I am not acquainted with any recorded facts to guide us in deciding this question. Each of these gentlemen lost one of their patients, but the others survived and retained limbs so useful, that the owners would not readily have exchanged them for artificial ones. Mr. Park's patient, a sailor, was able to ascend the rigging of his ship with the agility peculiar to that profession; and the woman on whom Mr. Crampton operated could walk the distance of eight or nine miles without suffering fatigue or inconvenience.

The advantages attending excision of the knee-joint over amputation in the thigh, in addition to the satisfaction of saving a limb, and promoting the credit of surgery, seem to me, *First*, The negative one of saving the patient from the inconvenience of resting his weight upon the face of a stump: *Secondly*, The positive one of preserving for him the tarsus, metatarsus, and toes, which constitute an apparatus much more efficient in protecting against the effects of concussion than any artificial one that can be constructed. Influenced by these considerations, I resolved to try the operation in some of those cases of diseased knee which so frequently result from white swelling in young subjects, and are condemned without any ceremony to amputation."

Case. J. Arnott, æt. 8, was admitted Dec.

1st, with the left knee very much enlarged, and immoveably bent at an acute angle with the thigh; there were two sinuses leading to the bone on the inner side of the joint, the health was broken, and "he seemed to be devoted to *speedy destruction*." The disease was of *three year's duration*, and had resulted from a fall on the ice.

On the 7th Mr. Syme made two incisions across the fore-part of the joint, extending from one condyle of the femur to the other, meeting at their extremities, and including the patella between them. The included integuments and patella, which was much diseased, being removed, the extremity of the femur was exposed and sawed off, but in doing this the periosteum was separated too much from the bone, and another portion of the latter was taken away. The head of the tibia was next exposed and removed by cutting pliers, one of the articular arteries tied, the wound dressed, and the limb extended by splint and bandage as far as the contraction of the hamstring muscles would allow. Exfoliation of the tibia was threatened and things at first wore a gloomy aspect, but by cautious extension and counter-extension the displaced extremities of the bones were reduced, the limb became straight, the wound in four weeks was nearly healed, and the limb is daily becoming more useful to the patient.

Case 2. Ann Mackintosh, æt. 7, was admitted Dec. 14th, "on account of a white-swelling of the right knee, which had existed eighteen months, and was now in its last stage;" there was a large sinus above the inner condyle, through which Mr. S. introduced his finger into the joint and felt it extensively diseased. Mr. S. performed an operation similar to that in the former case, and, as in that, the removed articulating portions of bone were extensively ulcerated and carious. "The soft parts, however, were much less swelled and less altered by the gelatinous degeneration of scrofulous action than in the boy's case; the result, therefore, was expected to be, if possible, still more satisfactory." But it was not so, for the difficulty of preventing

dislocation of the bones was great, the femur, so far as it was visible, presented a bare and dead-like surface, and when Mr. Syme, in order to check more effectually the tendency to displacement, cut away about two inches more of the femur with the pliers, he was astonished to find that the bone was extensively denuded. Amputation now appeared to be the only means left, but our author waiting a little "in the expectation of nature pointing out at what part of the limb the operation ought to be performed," the patient gave Nature and Mr. Syme the slip, by dying in the interim.

"I do not think that the enemies of excision can found any thing on this case, since it would appear from reasoning, and has been in a great measure proved by experience that excision of a joint is less dangerous than amputation of the limb; and the only question that can be agitated in respect to the merits of the operation in this situation concerns the utility of the limb which is preserved."

We are disposed to differ from Mr. Syme in this sentiment, for we fear that the enemies of excision and the excisor might find a good deal upon the case, and a superstructure too of a very disagreeable nature to Mr. S. We must confess that more meagre details, and more questionable observations could scarcely have been put together on the occasion. We are told in the commencement, that the case was one of "white swelling," which means any thing or nothing—we are told, that the prognosis from an operation is satisfactory, because the soft parts are comparatively little altered by the gelatinous degeneration of scrofulous action; a gelatinous degeneration of an action! We are told that because the femur is denuded farther than the finger can reach, amputation is the only chance, but that amputation is delayed till Nature points out the part of the limb, where the knife shall be applied. We know not whether Mr. Syme, like Numa, in the Roman days, may have found in the grots of the surgical hospital, an Egeria denied to his brethren,

but certain we are, that Nature is by no means disposed to turn finger-post to amputing surgeons in this metropolis. We have heard indeed of a line of demarcation being formed in the progress of mortification, but in cases like Mr. Syme's we never saw, nor do we hope to see it. Finally, we must regret that the sins of omission are by no means trivial, for not a syllable is said of the general symptoms till the sudden announcement of the patient's death. It is with a case, as with a tragedy, when great and fatal events are brought about without without any ostensible means, critics have ever condemned the bard, and the pit have commonly damned the play. So much for this particular case.

Mr. Syme remarks that theory and experience combine in proving that excision of the knee-joint is less dangerous than amputation. We are not so sure of that. Mr. S. adverts to six cases, the only ones of which he has heard, and of those six, three terminated fatally. Is the mortality so great after amputations of diseased joints? We apprehend not. In making these remarks we would not be understood as entering on the discussion of the general question of excision of joints, for we really have not thought sufficiently on the subject to warrant us in pronouncing an opinion. We doubt, however, if the operation will ever become so general as Mr. Syme imagines, and we further doubt its applicability to joints like the knee. It is a painful, tedious, and we say it advisedly, unseemly operation to look at; its dangers are considerable; its advantages at the best not wholly indisputable; and we repeat that in some cases of disease of the knee-joint, when suppuration extends for some distance up the thigh, it is quite inadmissible. We believe, however, there are cases, especially of disease in the upper extremity, in which its employment may be advantageous, but these can only be determined by the experience of many and of judicious surgeons. Into their hands we commit the question.

XLIV.

WORCESTER INFIRMARY.

ANEURISM.*

CASE 1. *Aneurism, Ligature of the Femoral Artery—Amputation—Recovery.*

JOHN MILNER, æt. 30, admitted Oct. 3, 1629, under the care of Mr. Pierpoint, with a pulsating tumour extending from above the middle of the thigh to the knee, and the skin suffused with an inflammatory blush; an opening in the inner part of the tumour about the size of a shilling, disclosing a dark speck of coagulum pulsating perceptibly; œdema of the limb extending nearly to the groin; pulse very languid; some cough; sallow and anxious countenance.

Is a hard working man, and accustomed to lift great weights. Thinks himself healthy in general, but has had asthma from his birth. About five weeks ago, he was attacked with pain just above the knee, extending to about the middle of the thigh, where he said there was a small hard lump, in which he felt a beating, particularly when he pressed his hand upon it, in the act of milking. He says that ever since a kick which he received from a horse, 20 years ago, there has been a tumour about the size of a large pea, about the middle of his thigh. Had advice for it a month since. Leeches and blisters were applied at different times. The thigh was rolled up, under the pressure of which it began to swell exceedingly; six days since, supposing the tumour to be an abscess, a lancet was introduced, and a little coagulated blood came away, and on the following day the wound burst, and about three pints of blood gushed out, and then stopped spontaneously. The wound was then closed, and the limb bound up exceedingly tight.

At 3 p. m. next day, the femoral artery was tied about an inch below Poupart's ligament, and the wound was united by sutures and sticking plaster. *A poultice to the ulcerated opening, and an anodyne in the evening.* The anodyne was repeated, he pas-

* Mid. Medical and Surg. Report, No. vii.

sed a good night, and was better on the 5th. On the 6th, grumous discharge issued from the opening in the tumour, and on the 7th it was very copious—no pulsation in the limb, which was much less swollen, since the operation. 8th, Great discharge from the inferior opening—superior one pale and without much union—œdema decreased—purged. *Mist. cret. c. tinct. op. ʒi x. conf. arom. ʒj. post. sed. liq.* The purging ceased and the upper wound improved. On the 10th the œdema of the thigh nearly gone; a counter-opening made two inches above the ulcerated wound, and “an amazing quantity of pus discharged.” 11th, Portions of coagulum evacuated from both lower openings—wound in the groin looking healthy. *Quinine draught every six hours—meal and beer—gentle bandaging.* On the 14th the lower openings laid into one. Next day the coagulum was found protruding through the lower wound, and its removal was followed first by a large quantity of pus; and then by a gush of arterial blood, which continued to well out of the wound. The hæmorrhage was restrained by stuffing the wound with lint. Amputation was now determined on in consultation, and immediately done, close to the trochanter major. Six vessels were tied, the internal circumflex was very large and bled profusely, and the patient was so exhausted, as to require laudanum, and brandy and water. The aneurismal cavity extended from the inner condyle to three inches up the stump between the muscles; there were hardly any remains of a sac; the internal coat of the popliteal artery was much diseased, and a ragged opening existed in its upper part; the bone for the space of three or four inches was denuded and subjected to considerable absorption; and finally, great destruction had taken place in the soft parts around it. Stump dressed with sticking-plaster and chalk cerate. On the 17th he was ordered infusion of roses and quinine, and next day, on the first dressing, partial union had taken place. 19th, Discharge from stump profuse; ale and egg for breakfast. On the 21st, the ligature came away from the upper wound; healthy granulations on the stump. On the

29th, the upper wound was perfectly healed. On the 2nd Nov. “general union” of the stump. A small sinus formed at the upper part of the stump, and a piece of bone died and was removed, but with the exception of these accidents, and a slight fall which he experienced, no untoward circumstances obstructed the gradual progress to recovery, a desirable consummation that took place on the 31st Dec. when the patient was discharged cured.

The foregoing case is a happy illustration of good surgery and bad. The latter was well exemplified in the treatment of the case before its reception in the hospital, the former in its subsequent management.—There is one point however, of which we are disposed to question the propriety, and it is this; on the patient's admission, the diffused aneurismal swelling extended from the knee to above the middle of the thigh, and for this the “femoral artery was tied about an inch below Poupart's ligament.” Under these circumstances it cannot be doubted that the ligature was placed on the common femoral, above the origin of the profunda. We need not proceed to explain that this operation would be much less calculated to obviate hæmorrhage from an opening in the popliteal artery, than tying the superficial femoral itself; and, under correction, we submit that sufficient space existing for this operation, it ought to have been adopted in preference to that which was actually performed. The improper puncture of the sac, reduced the case very nearly to one of wounded artery, and we all know the practice in such a case is, to tie the vessel above and below, or if that be unattainable, to secure the upper portion as closely to the wound as circumstances will permit.

CASE 2. *Aneurism of the ascending portion of the Arch of the Aorta.*

Joseph Freeman, 57 years of age, a sawyer by trade, in the habit of working in the pit; a particularly muscular, stout, thick-set man, of the ordinary stature, and who had been a

hard drinker, was admitted into the Worcester infirmary, September 13th, 1828. Complaints of pain in the right side of the chest, much augmented on inspiration, with urgent dyspnœa and cough. Pulse full; tongue foul; bowels pretty regular. There is considerable dilatation, and increased pulsation of the arteries about the upper portion of the same side; and a pulsating tumour, near the size of a pigeon's egg, at the intercostal space between the second and third ribs, is distinctly felt, and perceptible, also, to the eye.

From his occupation, he has been in the constant practice of moving very heavy pieces of timber; but has no recollection of the receipt of any particular injury, from which he could date his present affection. He states that he was first seized about twelve months or more ago, previous to this time, with shooting pains in the right side of the chest, and weakness of the right arm; these symptoms he attributed to cold, and still continued his employment, for perhaps four or five months, being bled for the pain twice at his own request. Finding his disease getting worse, he at length consulted a surgeon, who prescribed frequent topical bleedings, by the aid of leeches, a very abstemious diet, especially avoiding all stimulating liquors, with perfect quietude; from such treatment he derived much benefit. Soon after this, he obtained a letter for the infirmary.

On his admission, he was cupped on the right side, and took a saline aperient mixture every four hours. Low diet. The cupping very materially relieved his breathing; but in a few days the pain in the side much increased, with accelerated circulation; for the relief of which, leeches were applied, and a mixture, containing the tincture of digitalis, administered three times in the day, keeping the bowels regular, with five grains of the cathartic extract at bed-time. The vinum colchici was also given in conjunction with the tincture of digitalis, and leeches very frequently had recourse to: blisters, too, were used on several occasions.

On the 3d Nov. he had much pain in the

tumour and dyspnœa, with troublesome cough and rattling in the throat (a very prominent symptom since his admission.) Eight leeches were applied, and afterwards a seton, but the latter aggravated the distress and was withdrawn. Narcotics were given, and particular symptoms met as they arose, whilst spare diet and absolute rest were strictly enjoined. The disease made gradual but steady progress during the Winter, and in February the tartar emetic ointment was rubbed on his side, whilst tincture of digitalis and syrup of poppies were given in mixture daily. He remained in the infirmary about five months, and was made an out-patient on the 23d of Feb. 1829.

"After this time, I was in the habit of visiting him at his own house, for his sufferings were such, that he was unable to walk any distance without the greatest difficulty. The last time I had an opportunity of seeing him, the symptoms were all very materially increased. His nights were restless, with frequent orthopnœa; great soreness in the right side, aggravated on coughing; tumour more diffused, the pulsation being evident between the third and fourth ribs, but less vehement than at the intercostal space directly above; carotids much excited; constant head-ache; arm on same side painful, with a sense of numbness and loss of power; tickling cough; distressing rattle in the throat; expectoration neither bloody nor purulent, difficulty of lying down in bed, often obliged to get up and walk about his room from dyspnœa, and a sense of suffocation occasioned by the recumbent posture; inclination to vomit, with frequent retching; bowels open; urine scanty and dark coloured; tongue with a slight brownish coat in the centre; pulse 112, rather full, regular; eyes glassy; great anxiety."

His chief relief was from the use of leeches, and these to the number of eight or ten, were very often applied."

On the 2d Aug. whilst making some inconsiderable exertion in the back yard, he fell down and expired in a few moments.

"*Sectio Cadaveris.* The body was by no means attenuated, but there was great pallor of the countenance and lips, indeed, throughout the whole cutaneous surface, there ap-

peared a total want of blood in the capillaries. The chest, on percussion, emitted a good sound on the left side, but uniformly dull upon the right, especially around and below the situation of the tumour.

On opening the cavity of the thorax, an aneurism, of a very considerable size was discovered involving the ascending portion of the arch of the aorta, implicating the arteria innominata, and extending as far as the origin of the subclavian on the left side, the former vessel seeming much dilated and thickened. The tumour extended anteriorly from the second to the fourth rib; but no absorption had taken place in the osseous or cartilaginous structure of either of these, or the intervening one, in contact with the disease. On cutting into the pericardium, a large quantity of serum was removed, and a coagulum of crassamentum was observed completely surrounding the heart, and forming, as it were, a mould of that organ. The pericardium, indeed, was literally filled and distended with the effused blood; in quantity, I should conceive at least twenty ounces. The heart, itself, *was strong and apparently healthy*; it may be, however, *somewhat larger than natural*. One of the aortic valves had a large process of ossific matter in it, the other two being perfectly free from any deposit of the kind. There was an opening, though partially closed by a plug of lymph, between the sac and the pericardium, through which the blood had escaped, of sufficient size to admit the passage of a small quill; it had no mark of ulceration, but gave to me the impression of a rent. The parietes of the sac were of unequal thickness, in some places an inch or more, in others, not exceeding the twelfth part of one. It was thickest at the front, where confined by the ribs, and this contained within its substance a second tumour, having much the character of a scrofulous gland in a state of suppuration, for on dividing it, a curdy or cheesy kind of matter escaped; it had no opening of communication with the sac. The trachea was much compressed by its contiguity to the disease, and was removed with it, the aneurism being attached

by cellular membrane. Very extensive adhesions were likewise contracted both in the anterior and posterior parts of the thorax, and these, together with the flattened state of the trachea, must greatly have diminished the faculty of respiration.

A portion of the aorta below the tumour, being cut out and laid open, exhibited its coats in an unhealthy state; they were generally much *inflamed* and thickened, the internal one being thrown into rugæ, with here and there numerous irregular depositions of ossific matter and *lymph*; the latter, when removed, showing a surface nearly approaching to ulceration."

The above is a very characteristic case. The pulsating tumour between the intercostal spaces to the right of the sternum indicated the existence of aneurism at the root of the aorta, and the tickling cough and slight dysphagia, with the preternatural pulsation of the carotids and heart symptoms, pointed out with almost unerring certainty more general affection of the arch and probably hypertrophy of the left ventricle. Those who are in the habit of studying cardiac disease on a large scale with the stethoscope could, to use a coarse expression, swear to the disease with their eyes shut. It is said in the notes of the dissection that the heart was "strong and apparently healthy; it might be somewhat larger than natural." Had the reporter been conversant with the diseases of this organ, we have no doubt but he would have discriminated hypertrophy of the left ventricle, for in four cases out of five of the aneurisms or dilatations of the aorta which we have witnessed, such has been the pathological condition of the heart. The profession in general are but very imperfectly acquainted with the almost universal connexion between disease of the heart and diseases of the arteries. In the notes of the *sectio cadaveris*, it is also stated that the coats of the aorta *below* the tumour were *inflamed*, and encrusted with *lymph*. This is a mistake, for neither is the thickening of the coats of arteries the result of in-

flammation nor are the *végétation-like* incrustations on their interior coagulable lymph. The changes and deposits are the results of hard labour or old age or both, the lymph-like concretions are the fibrine of the blood, deprived merely of its colouring matter. Of these facts there can be no doubt, and the reporter's statements are misconceptions.

We have reason to believe that aneurismal dilatations or pouches of the aorta at its root, or even within the embrace of the pericardium, are not uncommon. We lately saw a dissection of such a case, we have another patient so affected under our care at the present time, and M. Cruveillier in his recently published plates of morbid anatomy delineates a representation of a third. Add to this the case of which we have just given an account, and two or three others of which we have read, and the list, without any research, will be respectable. When tolerably far advanced the diagnosis is not difficult, but when only in their first or incipient stage, the true nature of the cases is not so easily made out. In the two instances that have fallen under our own observation there was the *bruit de scie* or *de soufflet* in the tumour, and more or less evidence of hypertrophy of the ventricle. When the disease has made some progress the characteristic symptoms or appearances are:—a pulsating tumour more or less extensive and prominent in the intercostal spaces immediately to the right of the sternum, generally between the second and the fourth ribs; a *bruit* in the tumour, and more action than natural in the heart; preternatural pulsation in the arteries of the neck; perhaps some difference of pulse in the upper extremities and numbness of the right; a certain degree of cough, dyspnoea, palpitation, and other usual symptoms of cardiac affection; a middle or advanced age; and a history corroborating the suspicion of aneurism. We have known such an affection in its early stage considered as bronchitis, and we have seen an aneurismal dilatation of the aorta and innominata pressing on the trachea, overlooked and treated for the same; but we are sure that a physician in the habit of employing the stethoscope, and under-

standing it, will not make one such blunder, where another who does not employ it makes five.

With regard to the treatment we have little to say. Rest and the alternation of the mild carnotics, as conium, hyosciamus, poppy and lettuce, with a diet below par, and occasional *small* bleedings, appear to us to be productive of more benefit in the great majority of cases both of aneurism and organic disease of the heart, than heroic treatment whether it be bleeding or starvation. The first almost certainly drives on a drop-sy, and we really believe that the latter has been carried by practitioners much too far. With regard to the exhibition of digitalis, we have only to say that we are afraid of it, for in the hands of those who have used it freely, we *know* that it has not been an unusual thing for their patients to have died most suddenly and unexpectedly. More ghosts than one have been guided to the "shores of Acheron," by the caduceus of foxglove. We know not what to say of counter-irritants, except that we have seldom seen them of service, and at times have thought that they did mischief. Leeches are occasionally useful, but they should not be placed upon the tumour, in fact the practitioner should always apply his counter-irritants, if he uses them, in the vicinity only of the disease, for nothing can be more pernicious than leeching and blistering the skin directly over an aneurism. We believe that more benefit is derived from plasters of belladonna or stramonium than from any applications of the former class. Of course the flying attacks of inflammation that occasionally come upon the pleura, the lung, or the pericardium, must be met at the time by appropriate, but not violent measures. Had we space to dilate on this topic, to us a very interesting one, we might hope to draw the attention of our brethren to some curious and some useful points. Here, however, we must stop, and our only excuse for having ventured on these, already tedious, observations is, that we have really seen a good deal of this class of affections, and we do not speak from random observation, theoretical notions, or bookish experience.

XLV.

ST. GEORGE'S HOSPITAL.

SLOUGHY ABSCESS OF THE LEG, SUPERVENING ON OTHER DISEASES, AND OCCASIONALLY ATTENDED WITH INFLAMMATION OF THE LARGE NERVES.

It appears that unhealthy suppuration in the leg not unfrequently arises in the progress of fever or febrile affections, after injuries of the head, fractures in the extremities, and, in short, from a variety of causes.—We are not aware that writers have particularly noticed these cases, but we have reason to believe that they are very frequent, the symptoms are peculiar and severe, and the result not seldom fatal. It is proper that practitioners should be acquainted with the nature and existence of this affection, for there is only one successful mode of treatment, and unless that be speedily adopted disastrous consequences should be seriously apprehended. Without any further preliminary remarks, we shall mention the particulars of some of the cases which have fallen under our observation.

CASE 1. Menorrhagia—Swelling of the Leg—Sloughy State of the Posterior Tibial Nerve.—On the 6th of last June, one of the dressers of the hospital was requested to see a woman of the name of Sarah Lazenby, about sixty years of age. He found her in a filthy hovel in Westminster, labouring under typhoid symptoms, with slight menorrhagia, and pain in the head and back.—It was about “the turn of life,” and until a fortnight previously she had missed the catamenia for three months. At that time, however, she had been attacked with menorrhagia, which lasted for four or five days, then ceased, and again returned two or three days before the dresser's visit, when it was nearly suppressed, as has been mentioned.

Next day, 7th, she complained of great pain and tenderness on pressure in the right leg, which was swollen at the calf. On the following evening, 8th she was received in the hospital under Dr. Seymour. The treatment had consisted of salines with the liquor opii sedativus.

On her admission she was evidently in a state of great exhaustion. The leg was much swollen at the calf and exquisitely painful, but although very tense, no distinct fluctuation could be felt. On the 9th she died.

Sectio Cadaveris. Body not much emaciated. Right leg still swollen, especially about the upper part of the calf. On making an incision on its inner side, a considerable quantity of bloody serum was found in the subcutaneous and inter-muscular cellular membrane—the gastrocnemius and soleus were swollen and somewhat tense, with small coagula of recent blood effused between their fasciculi—and the cellular membrane between the soleus and the deep-seated layer of muscles was infiltrated with serum, some blood, and in two or three places an attempt at pus. The posterior tibial nerve in the upper third of the leg was enlarged, dark-looking, injected, inflamed, and evidently implicated in the commencing sloughing of the cellular membrane.—The veins were perfectly healthy.

Abdomen. Uterus as large as in the second month of pregnancy—its cavity of considerable size, with coagula of blood attached to its mucous membrane, which was rough at the fundus, vascular, and shaggy. Parietes of the uterus rather flabby—vagina healthy.

Cranium. Much venous turgescence, and good quantity of serous effusion between the membranes and in the ventricles.

CASE 2. Fever—Sloughy abscess of the Leg—Implication of the Posterior Tibial Nerve. A very similar case to the preceding was lately under the care of Dr. Seymour and Mr. Hawkins in the hospital.—The patient was labouring under fever, and in low state, when rather suddenly the leg swelled, became extremely painful, and appeared to be rapidly running into mortification or sloughing. Deep-seated fluctuation being felt an incision was made through the fascia, when a quantity of stinking pus was discharged. The patient experienced temporary relief, but sank in a few days.

On examination there was found a large, deep, sloughy abscess in the calf, and the

posterior tibial nerve was involved in the inflammation. It was swollen and enlarged for an inch or two in length, injected, dark, and sloughy looking.

In both the foregoing cases the patients had suffered exquisite pain, and the nervous system was excessively depressed, with genuine typhoid symptoms. We remember having witnessed two or three years ago a case resembling the former in some respects. The patient was a young man under the care of the late Mr. Rose, and we think had undergone some trifling operation. Suddenly an abscess formed in the leg, accompanied with low constitutional disturbance, and although the matter was discharged by free incisions, purulent depôts took place in the lungs, and of course proved fatal.

CASE 3. Blow upon the Head—Epistaxis—Abscess in the Legs.—John Sterden, æt. 27, a fishmonger, admitted April 28th, 1830, under Mr. Keate.

About four months ago he fell against a wall, and struck his head, but not severely. Two or three days afterwards the nose bled to a very considerable amount, which it did for a second and a third time. He was much debilitated and confined to his room in consequence, and in a fortnight after the epistaxis a swelling made its appearance in the calf of the left leg. Has never had rheumatic symptoms.

At present there is evidently an abscess of some extent, rather deeply seated in that situation—manner very quick and anxious—face pallid—health indifferent.

On the 1st of May an opening was made with a lancet at the upper part of the swelling, and much matter was discharged. In about a month another incision was made below and more matter issued. Pain now attacked the other leg and leeches were applied; the leech-bites festered; a poultice was necessary, and afterwards a roller which was drawn too tight by the dresser and produced considerable swelling of the leg. Matter formed in various parts and required incisions; one four inches long on the inner and upper part of the leg, another

about its middle on the outside, and a third in the calf; pus was freely discharged for some time from all. Aperient medicines, &c. were exhibited, and he was put upon sarsaparilla and nitric acid. The supuration in the left leg soon ceased, and the limb was strapped and bandaged. On the 4th of June the right leg was bandaged also, and at present, 20th, there is very little secretion of pus, although a good deal of tumefaction remains and some pain. His health is improved.

CASE 4. Fracture of the Leg—Abscess in the same—Sloughy Abscess in the opposite Leg. Thomas Risley, æt. 45, a publican, admitted June 9, 1830, under Mr. Hawkins.

In the calf of the left leg a large abscess, evidently deeply seated—much pain—skin not affected—aspect sallow—health indifferent.

Nine months ago broke his right leg near the ankle, and whilst lying in bed for the accident two abscesses formed in succession in the same leg. When he was recovering from these he was attacked with "ague," and after he had recovered from this with "inflammation of the liver." No sooner had this been dispersed than the present abscess in the left leg appeared, which is now about four months ago.

On the 10th the abscess was opened by cautious and deep incisions with a scalpel and director through the fascia. A considerable quantity of thin, dirty, bloody-looking pus was evacuated. Poultices, salines, and subsequently decoction of bark was employed, the health is surprisingly improved, and the tumefaction of the leg much diminished.

We might give one or two more cases of the same description, but enough has been said to shew that abscess in the calf of the leg is a frequent affection, that it generally occurs in cachectic or debilitated patients, and that sometimes it puts on so severe a form as to prove the cause of death. We have also shewn that the posterior tibial nerve may become implicated, and that the symptoms are then proportionably severe. With regard to the treatment, there can be

no question that early and deep incision, through the fascia if necessary, is the main thing to be depended on. The pus being discharged, the general health is to be attended to, and is greatly benefitted by sarsaparilla or tonics, as the case may require.

XLVI.

WESTMINSTER HOSPITAL.

There have been few capital operations or cases of importance here since our last report. Two cases of popliteal aneurism, for which the operation has been performed, are sufficiently interesting, however, to be worthy of more particular notice.

POPLITEAL ANEURISM.

CASE 1. Operation—cure. William Cooper, æt. 26, admitted March 24th, under the care of Mr. Guthrie. He is a farmer's labourer, residing generally some distance from London, tolerably strong and muscular in appearance, and has commonly enjoyed very good health until within the last two months, when he suddenly experienced, while walking, a sensation like that of cramp in the left ham. This feeling occasionally returned, but did not produce such inconvenience as to prevent him following his usual occupations; about four weeks since, the pain and symptoms generally became more serious, and he applied for medical advice. The gentleman whom he consulted informed him he had an aneurism, and recommended him to procure admission into some hospital. He rolled his leg for some time with a bandage, from which he suffered an increase of pain and inconvenience.

Present State. The thorax is well developed. Percussion elicits an audible sound all over the chest, which expands fully at each inspiration. Respiratory murmur natural, and lungs apparently quite healthy. The action of the heart is regular—the sys-

tole of the auricles and ventricles is perfectly distinct, both in the left intercostal space and at the base of the sternum. The force of the heart is much increased and its action is perceptible over the whole of the anterior part of the chest and in the axillary regions.

The patient is in other respects perfectly healthy. A tumour, exists in the left popliteal space, making a considerable prominence at the point of flexion; this may be made to disappear by steady pressure, and its pulsation is synchronous with that of the artery, and equally distinct in all parts of the tumour. Pulsation may be entirely stopped by pressure on the femoral artery or the groin. The patient complains of a dull pain in the part extending down the calf. The whole of this leg is larger than the other, and slightly oedematous. Ordered low diet, beef tea, and one egg daily—to be kept quiet in bed.

March 28th. His bowels have been freely acted upon by house-medicine, but he has a hard, full pulse, 92 in the minute, and he presents some symptoms of inflammatory action; he was bled yesterday to ℥viij . The blood abstracted is slightly buffed and cupped, on which account the operation has been postponed.

30th. The same symptoms are still observable, though less strongly marked. V.S. ad ℥xiv . The appearance of the blood is nearly natural.

April 4th. Much the same—pulse 72, soft and full. V.S. ad ℥xij .

5th. The blood drawn yesterday is slightly buffed, but less than at first. The tumour is gradually increasing in size, and the dull pain continues in his leg, increasing towards night—tongue pale, bowels open. Mr. Guthrie directed that the temperature of both legs should be ascertained. At 10, a.m. the temperature of the right leg was 92, and the left the same; at 10, p.m. that of both was 96°.

10th. At one o'clock, a.m. The operation of tying the femoral artery in the upper third of the thigh was performed.

Vespere. He complains of shooting pains in the knee and calf of the leg, pulse full. Hot flannels are applied to the limb and bot-

tles of hot water to the foot. Temperature of right leg 86°—left 82°. 10, p.m. The patient has slept a little, and the pain has abated considerably. Pulse 80, rather full—temperature of the right leg 93°, left 91°.

April 11th, 8, a.m. He has passed a comfortable night, but he complains to Mr. Guthrie this morning of pain where the incision was made. The leg is apparently more swollen, and the veins slightly distended—no pulsation in the tumour, and the temperature of both legs is 92. Pulse 100—tongue furred and whitish, skin hot, and he complains of pain in the head. Bowels have not been opened since the operation.

R. Potassæ Carb., ʒj.

Sacci Limonis, ʒij.

Aquæ 5x.

Sodæ Sulph. ʒj. M. ft. haust. 4tis horis. sumend.

6, p.m.. Bowels have not acted, but pain in the head is relieved; pulse 100, and not very easily compressed; temperature of the right leg 98—left 96.

R. Hyd. Submur. gr. iv.

Ext. Col. c. gr. vj. Ft. pil ij. st. sumend. Mist. salin. contin. 2dis horis donec alvus respondet.

12th. 8, a.m. Two doses of castor oil were also administered last night; the bowels have, however, only been imperfectly acted upon. He has slept tolerably well; skin is less hot; pulse the same. He complains of slight shooting pains in the inner side of the thigh; temperature of both legs 94. V.S. ad ʒxvj. Haus. Aperens statim.

10, a.m. He has had three evacuations, and the pain in his head is relieved. He has slight pain in the course of the femoral vein; pulse 110; his countenance is less flushed, but he is irritable. The blood abstracted is slightly buffed but not cupped; he says he feels low and weak.

Mist. Salin. c. Liq. Opii Sed. 4tis horis. 11 ij. pro dosi.

6, p.m. His countenance is more cheerful, and he appears altogether better.

10th. He has suffered from slight pains in the abdomen; the limb is quite easy.

Ordered liq. opii sed. 11xv. st. and to be repeated at 12 o'clock, if necessary.

13th, 8, a.m. The draught was repeated during the night, and after that he slept well, and is now free from pain, but occasionally he experiences shooting pains in the course of the femoral vein; just below the incision there appears a slight blush of redness with fulness, and tenderness on pressure. Temperature of both legs 93°. Pulse 98 and soft; tongue moist and less furred; the diseased leg is not so much swollen, and Mr. Guthrie thinks the tumour has diminished in size since the operation. The strips of adhesive plaster were loosened, and the patient ordered to repeat the aperient draught. Twelve leeches to be applied to the course of the femoral vein, and a bread and water poultice afterwards.

4, p.m. Mr. G. has again seen him; the leeches have bled freely, and he is slightly relieved; in other respects much the same; pulse 110; to be bled at nine o'clock.

10, p.m. Pulse 120, hard and full—V.S. ad ʒxij.—this bleeding has afforded him much relief. Cont. Liq. Opii Sed.

14th, 8, a.m. He has passed a good night, and this morning feels but little pain in the thigh. The blood is buffed and cupped—pulse 110, soft—skin cool—tongue white—bowels freely open—temperature of both legs 92. Rep. med.

10, a.m. Mr. Guthrie has removed the strips of adhesive plaster—the wound appeared healing—a good deal of healthy matter was discharged on pressure, and the wound dressed—there is slight tenderness of the thigh, but the patient suffers very little pain.

10, p.m. The thigh is much easier since the morning. Cap. liq. opii sed. 11jiv.

15th. The patient slept well last night; there is some degree of tenderness on pressure at the lower part of the abdomen, and he complains of inability to void his urine. No pain in the thigh, and great discharge from the wound; skin cool and moist; pulse 82, soft; tongue clean; bowels open.

12, a.m. He has emptied his bladder, and feels now much relieved, a roller, with padding in the course of the femoral vessels

has been applied to prevent the lodgment of matter.

16th. Mr. Guthrie dressed the wound this morning—the patient is going on well—pulse is soft and he experiences no pain in any part.

April 17th. Dressed by Mr. G. this morning, who observed that the tumour was evidently much diminished, and the veins are less distended.

27th. The patient has continued gradually improving—the wound being dressed every day and the bowels regulated by small doses of sulphate of magnesia. This morning both ligatures came away. Some luxuriant granulations were checked by the application of lunar caustic which produced swelling and tenderness—these were speedily relieved by poulticing.

May 10th. Since the last report the patient's general health has progressively improved—a slight purulent discharge existed for several days, but it has now entirely ceased, and the patient may be pronounced cured.

CASE 2.—Operation performed—cure.

Thomas M'Caughin, æt. 33, admitted May 14th, with popliteal aneurism in the left leg. He was brought up as a gardener, and has generally enjoyed good health. On the 2d of April last while riding at a good pace, his knee was crushed between another saddle and his own—he says the holster of his comrade's struck him in the ham. The whole limb from the knee downwards swelled and became very painful—unattended by any discoloration of the integuments, and he continued his usual occupation the succeeding four days. The day after the receipt of the injury, whilst walking, he first perceived the pulsation in the left ham, which continued to increase till he came to hospital, and was received into the hospital.

The patient appears in sound health—his chest is well formed, broad, and capacious—action of the heart regular. Pulse 64—bowels open—tongue clean—appetite unimpaired. Temperature of the affected leg 88. Ordered to bed and to have low diet.

May 15th. The man was placed upon

the table and Mr. Guthrie proceeded to the operation—having first traced the course of the artery he made his incision in that direction above the sartorius. The artery was readily found and tied, with scarcely any displacement of the parts—a small artery was divided before he came to the femoral, but was not very troublesome. Pulsation stopped in the tumour immediately the artery was tied. A single thread of dentist's silk was used. Mr. G. observed after the operation to the pupils that this patient would probably recover in less time than the one on which he had operated some time previous—that in the latter having cut a considerable branch close to the trunk, he had thought it right to place two ligatures upon the artery, in order to guard against secondary hemorrhage which it might have produced—hence in all probability, the cause of the discharge and protracted union—the intermediate portion having to slough away—he concluded by some observations on the mode of tying the artery, and the necessity of disturbing the parts as little as possible.

5, p. m. Mr. G. has seen him—the tumour appears already diminished—the veins are slightly distended—temperature of the limb 88. The limb is placed on pillows in the half flexed position, and flannel wrapped round it. He complains of sickness with constant pain around the thigh and ankle joints—no numbness of the leg is experienced—Cap. Liq. Opii. Sed. ℥xv.

16th. 8 a. m. He has passed a comfortable night—no febrile excitement—thigh and leg easy—pulse 68—bowels not opened since the operation—tongue moist—skin natural—countenance cheerful.

P. m. Feels rather sick, bowels have not been relieved since the operation—complains also of inability to void his urine—no pain, but a sensation of fulness in the pudic region—tongue moist and covered with a whitish fur—pulse 74—no pain in the limb—temperature 92°.

17th. 8, a. m. He has passed a comfortable night—bowels have been freely opened, and he complains of no sickness—pain, or sensation of numbness—temperature of the left leg 93°, of the right 92°.

18th. He has passed a good night—experiences no pain in either thigh or leg—bowels open, tongue moist—skin cool—pulse 74. The temperature of the affected limb is 92°. He takes no medicine.

19th. The wound has been dressed for the first time, and was found nearly united by the first intention.

June 13th. He has continued without an unfavourable symptom, and the ligature came away to day—being the 31st after the operation.

The advantages arising from allowing the aneurisms to continue for at least six weeks until the collateral branches had enlarged sufficiently to maintain the life of the limb have been here very apparent. The maintenance of the circulation never having been doubtful in either instance—the tumours rapidly but steadily diminished so as to leave no doubt of the cure being complete.

The operations were both performed in the upper third of the thigh, so that the ligatures were applied immediately by the side of the upper edge of the sartorius, scarcely displacing that muscle in the slightest degree, a very small portion of which was visible. In the 1st case, an artery running to the triceps muscle was divided and bled so freely as to fill the wound with blood and to require compression on the artery above to suppress the hæmorrhage, for which reason Mr. Guthrie said he applied two ligatures, the one above and the other below it in the same manner as he would have done if the artery had been wounded.

we shall notice the only four in detail, as bearing on a point of pathology now under investigation in this country.

Case 1. Mary B. aged 23 years, experienced on the second day after her accouchement, acute pains in the hypogastrium, with fever. Forty leeches were applied, and produced much relief. But the next day brought a renewal of the pains, to which were added abundant diarrhoea and frequent vomiting. The lochia became suppressed, the breasts collapsed. Sixty leeches were applied to the abdomen, and forty more in the course of the day. Next morning the patient appeared easy, and the lochia reappeared. On the 4th day there was great agitation and tendency to faintings. On the 5th delirium came on, and she complained of pain in the thigh, which was somewhat *œdematous* on the fore-part. On the 6th day, she began to expectorate blood and fetid matters—had involuntary motions—and rapidly sank.

On examination there was found much sero-purulent effusion, with false membranes in the cavity of the peritoneum. The cervix uteri and broad ligaments were infiltrated with pus. The majority of the uterine veins were gorged with the same fluid. The extremities of the fallopian tubes were injected and thickened—the ovaries enlarged and softened. There was a gangrenous focus in the right lung. To the above morbid appearances was added *suppuration of the whole leg affected*;—even the muscles were infiltrated with pus. No mention is made of any affection of the veins of the limb.

Case 2. G. ———, aged 37 years, of good constitution, experienced, on the 3d day after delivery, the symptoms of intense puerperal fever, which were met by most active treatment, and abated towards the eighth day; but the fever and abdominal pain soon reappeared—great restlessness and delirium supervened—and the patient sunk on the fifth day of the relapse.

On dissection there were evidences of very intense uterine phlebitis, to which

XLVII.

MATERNITE.

PUERPERAL FEVER.

M. TONNELE has published a long article on the above disease in the Archives for March and April, 1830, as observed in the MATERNITE Hospital, in the year 1829. Of many cases whose dissections are given,

were added collections of purulent matter, in the psoas muscles, which were softened in substance. There were no other alterations except some purulent depositions in the iliacus internus, and also in the triceps femoris.

Case 3. Eliz. Hain, aged 23 years, was seized with puerperal fever on the fourth day after her accouchement, and numerous leeches were applied which seemed to conquer the malady quickly; but on the fourteenth day after delivery, when she was in full convalescence, an intense pain took place in the hypogastric region, without any ostensible cause. Next day there was violent fever, vomiting, deep-seated pain in the hypogastrium, and in the left iliac fossa. Forty leeches were applied, and produced a temporary relief. Then succeeded a series of seven symptoms, which left little doubt as to the nature of the malady. Delirium, agitation, small quick pulse, fetid diarrhoea, deep-seated pain in the hypogastrium—and ultimately in the thighs and one arm, but without any swelling, redness, or other external phenomenon.

On dissection, the deep-seated muscles of both legs were infiltrated with thick pus, the muscular fibres in contact with the pus were softened, and there were several isolated purulent depôts, the size of an almond, in the substance of the muscles of the leg, especially in the tibialis anticus. There was a purulent depôt about the middle of one thigh. The right fore-arm presented similar appearances. There was some pus in the cavity of the left knee. The veins of the uterus were filled with pus, and their internal surface discoloured and rough. The left ovarium was transformed into a purulent depôt—adhered to the rectum, and opened into that gut by a small orifice. The peritoneum was natural, and all other parts unaffected.

Case 4. B. —, aged 23 years, of vigorous constitution, experienced, soon after delivery, the symptoms of uterine phlebitis, soon followed by those grave phenomena which result from pus being carried into the torrent of the circulation. Oedematous

swellings in different parts of the limbs appeared, and the patient died.

On dissection, numerous purulent depôts were found in the muscles of both legs, thighs, and arms. The cavity of the left knee also contained much pus of a good quality, without any appreciable affection of the synovial membrane. Most of the uterine veins were filled with purulent matter, and the parietes of the womb were thickened and unequal. Several of the larger lymphatics were gorged with the same fluid.

The author, (who, no doubt, speaks the sentiments of M. Desormeaux) conceives that the phenomena above-mentioned, namely, the purulent depôts in various and distant parts of the body, cannot be attributed to common inflammation.

“But if, says he, there exists in the constitution a general cause, manifest, and, in some measure palpable, capable of explaining these various effects—if we can detect pus ready formed in the uterine vessels, whence we see it carried by the blood to all parts of the body—if characteristic symptoms announce, in an almost certain manner, this importation of pus into the bosom of all the organs, and constantly precede the abscesses in question, have we not a thousand reasons for believing that these purulent depôts in the lungs, liver, brain, &c. are not the effects of common inflammation, but the result of a peculiar operation, or simple deposition of matter in the midst of the muscular tissues.”

The author anticipates an objection to the muscles of the extremities being affected in preference to those viscera where the venous circulation flows in great abundance, as the lungs, the liver, &c. but he appeals to certain experiments of M. Cruveilhier, who injected mercury into the veins of animals, and often found the foreign matter deposited in the middle of the muscles. He acknowledges that it is very difficult to account for this caprice, as it were, of the disease, in respect to the direction which it takes to one or other organ. But passing over many

cases and arguments, we come to an important table exhibiting the results of 390 post-mortem examinations of puerperal fever, with the various appearances on dissection.

Of these 222 cases, there were 193 cases of peritonitis—197 do. exhibiting disease of the uterus and appendages.*

The alterations of the uterus and of the peritoneum were variously combined in 165 cases. They were isolated in 57 instances, viz:—there was peritonitis alone in 28 cases, uterine affection alone in 29 cases. In respect to alterations in the uterus, there were 79 cases of simple metritis—29 of superficial mollescence—20 of deep-seated mollescence—53 of ovarian inflammation—four of ovarian abscess. The following is a tabular and comparative view of alterations in the vessels. In 90 cases, there was pus in the veins—in 32, pus in the lymphatics—in five cases, pus in the thoracic duct—in nine instances there was inflammation and suppuration in the lumbar and other lymphatic glands.

SUPPURATION OF THE VEINS was accompanied by that of the uterus in 32 cases—by mollescence or putrescency of the uterus in 11 cases—by metritis and mollescence united, in five cases—by peritonitis purely, in 34 cases—and it (suppuration of the veins) was isolated, or unaccompanied by any other affection, in eight cases.

SUPPURATION OF THE LYMPHATIC VESSELS existed in conjunction with that of the veins, in 20 cases—with that of the uterus, in 13 cases—with mollescence alone of the womb,

in six cases—with simple peritonitis, in three cases—without any other lesion, in two cases.

INFLAMMATION OF THE OVARIES was accompanied by simple peritonitis in 29 cases—with various lesions of the uterus, in 27 cases—with simple metritis, in eight cases—with mollescence of the uterus in seven cases—with suppuration of the vessels, in 12 cases—and with all of the above alterations combined, in 16 cases.

From the above tabular facts, it results that, in fatal puerperal fever, the uterus is rather more frequently affected than the peritoneum—that the two affections are, in a majority of cases, combined—but they are sometimes entirely isolated. The table also presents this remarkable fact that, in 134 cases, the venous or lymphatic vessels of the uterus contained pus. Whether this pus was formed in the vessels themselves, or carried thither by absorption from other parts, is a secondary consideration—for the danger is the same, in both cases, of a general contamination of the circulating fluid. That the pus is sometimes, at least, formed in the vessels themselves, appears to be proved by the fact that, in eight cases where pus was found in the veins, there was no other lesion whatever. This fact, the author thinks, may throw a doubt on the opinion that the pus is ever absorbed into the veins from other parts. The table in question may help to explain the great danger or mortality in puerperal fever—it may also tend to throw some doubt on the propriety of the term puerperal peritonitis, or puerperal metritis, which has been so often applied to the disease. The designation "PUERPERAL FEVER" is freer from objection than either of the above terms. It prejudices nothing.

* The reason why the aggregate of the two classes of affections exceeds in number, the total of dissection, is, that, in many cases there was a combination of peritonitis and metritis.—*Ed.*

CORRESPONDENCE.

THE Paper of Dr. HUGH FRASER (of the Civil Hospital of Gibraltar) is received. The paper shall find a place in the next number of this Journal.

INDEX TO THE FIRST TWENTY VOLUMES OF THIS JOURNAL.

We have received many pressing letters on the subject of a GENERAL INDEX, and some generous offers as to its construction. To Dr. C. of W. we return grateful thanks, and shall write to him privately. The Index may be depended upon. We shall endeavour, by small type and great labour, to make it a very trifling tax on our Subscribers.

THE
Medico-Chirurgical Review,

No. XXVI.

JULY 1 TO OCTOBER 1, 1830.

I.

AN INQUIRY CONCERNING THE INDICATIONS OF INSANITY, WITH SUGGESTIONS FOR THE BETTER PROTECTION AND CARE OF THE INSANE. By *John Conolly*, M. D. Professor of Medicine in the University of London. Pp. 495, 1830.

"Hic homines ex stultis facit insanos."

SOUNDNESS of mind is a comparative phrase. What appears sensible and rational to one mind appears neither rational nor sensible to another, and we deem it to be a task of as great difficulty to fix the standard of judgment as of taste. The eccentricity which we easily detect in another, may long remain unnoticed in ourselves; and opinions, which we ardently cherish and zealously support, others may regard as hastily formed or totally unfounded. The man, who believed himself to be a crown-piece, and went round his tradesmen, requesting them not to accept it if offered in payment, would nevertheless ridicule his neighbour, who fancied that his legs were made of butter, or his nose of sealing-wax. Few men are unexceptionably sane, just as few men are unexceptionably healthy. Some predominance of one faculty or passion, some superiority of one function or organ above another, may be discovered, and we can see no very good reason why an insignificant coxcomb, who has an immoderate opinion of his merits, should not have the same care taken of him, as a beggar, who fancies himself a duke or prince; or why a man, who starves and languishes in the midst of plenty, should be trusted to his own keeping more than he who imagines himself an emperor in the midst of poverty.

This important fact seems almost entirely to have been neglected, and most of those, who have written upon insanity, seem to consider it as a well-defined and specific malady, so palpably pronounced and so prominently featured, that few should find much difficulty in discovering it when present, or easily mistake it when once observed. But the truth is that there are just as many grades of mental derangement as there are of mental perfection. One mind excels in imagination, another in memory;—in one it is the judgment which is weak, in a fourth it is perception. It is not required of us to state wherein these differences consist, or whence they originate:—whether they arise from original modifications in the metaphysical construction of man, or depend upon the various degrees of perfection in which his corporeal organization exists. May not mind, which is as much a creature as matter, although endowed with a different nature and

subject to different laws, be given in different degrees of power, if not in different quantities: and may not the metaphysical part of a human being be primarily subject to as many and as great varieties of original construction as his physical part? We see people, at first educated and afterwards living as exactly under the same circumstances as it is possible to arrange them, differing as much from each other in talent, taste and habit, as does the number of their pulse, or the color of their hair; and is it not most rational to account for those mental varieties, just as we explain these corporeal differences—upon original modifications of structure and function? By the mere Materialist, who believes that all the metaphysics of man are the result of his bodily mechanism, and by the semi-Materialist, who more liberally admits the existence of an independent spirit, but most strangely maintains that mind—the thinking, reasoning, and only actively spiritual part of man—has no connexion with the soul, or this independent spirit, but is a mere function of the brain—this view of the question can scarcely be opposed. For if mind be the function of the brain, and if ideas be the product of this function, it is evident that both the product and the function will depend for their energy and extent on the activity and health of the cerebral organs. But the cerebral organs will be admitted to be subject to and to present all the varieties of strength, activity, and soundness, which are discoverable in any other form of glandular structure; and it is unnecessary to add how endless and how great these varieties are! Consequently, the doctrine—that mind is originally the same in all men—cannot be maintained by any, who regard mind as the sole result of mechanism; and we can see no unanswerable argument in its favour to be advanced by those, who advocate the spirituality as well as the materiality of man. In either case, however, the fact remains unaffected, that the talents and tastes and habits of different men do differ from some cause, and it is equally certain that these varieties are as universal in their occurrence, as great in their degree, and as important in their operations as are those corporeal varieties which distinguish nations and individuals. To constitute, or preserve a healthy state of body every organ must be firmly braced, and every function must be finely balanced; and to constitute, or preserve a sane state of mind the brain, or organ of mental manifestation, must not only be well formed and in good health, but every faculty of the mind must bear a natural proportion to each other. It is the want of this proportion which constitutes eccentricity, and the limits between eccentricity and madness are very imperfectly marked.

*Nimium insanus paucis videatur, eo quod,
Maxima pars hominum morbo jactatur eodem,—*

are the words of Horace, than whom few were more accurately acquainted with human nature; and it matters not whether mental disorder be denominated simplicity, or eccentricity, or idiotcy, or monomanism, or madness, it is essentially the same. It may assume the form of some trifling peculiarity, which may be seldom observed as it may only occasionally appear; or it may wear the character of some ludicrous hallucination, which taints and tarnishes every action and thought. It may be limited to a single faculty, or it may invade every element of the mind; it may be elicited by certain subjects and circumstances, or it may so engross the character, as to be at no period absent or inactive.

One of the chief objects which Dr. Conolly has contemplated in the

work before us is to show, how intimately sanity, eccentricity, idiotcy and madness are connected, and how easily they pass into each other. In endeavouring to effect this he goes into a short analysis of mind, and traces up its history through all its aberrations, whether congenital or induced. In the child every faculty of mind, as well as every corporeal function is imperfectly developed. At first the infant displays very little intellectuality, beyond what is connected with *sensation*, and *perception* which is the result or effect of sensation upon the brain. Then follows *memory*, or the power of preserving and recollecting these perceptions; afterwards appears the faculty of classing, arranging and multiplying these perceptions, which metaphysicians denominate *association*; and last of all is added *judgment*, which discovers resemblances or differences between these perceptions, and draws inferences accordingly. All these faculties thus successively developed gradually increase. Sensation becomes more exact from experience, perception gains acuteness by exercise, memory expands as sensations multiply, and the judgment, which is the last and slowest in coming to maturity, acquires strength by the frequent formation of comparisons.

The power of these faculties varies exceedingly, and their natural varieties are rendered more conspicuous by many accidental causes. The experienced seaman can easily distinguish ships, between which the landsman is unable to detect any points of difference. The Peruvian can discover by his sense of smell the race, or country of many South American tribes. The Arab can observe the caravan approaching in the desert, before it is visible to another eye. The blind can often detect colours by the sense of touch. The man described in the *Spectator*, who could not dance except in the presence of a trunk, which had formed part of the furniture of the apartment in which he had been taught, is one of many illustrations which might be given of the influence of habit upon mind. Sacchini was never inspired, but when his favorite cats were reposing on his shoulders: and Rush mentions the cases of a clergyman and a judge, who were always mad, except when in the pulpit, or on the bench: Brindley, the engineer, betook himself to bed for a few days when any extraordinary exercise of mind was necessary; Ben Jonson wrote with most effect after recovering from a debauch; Sheridan was most eloquent when under the influence of wine; Curran spoke with greatest power after playing on the violoncello; and Gluck composed his sweetest harmony in a meadow, with some champagne at his elbow and a piano before him.

There is another primary faculty of mind which has not yet been mentioned—we mean *imagination*. This heaven-born power is purely and unmixed the gift of Nature. No tutoring of the mind can unfold it; no course of study, no labour of thought, no stores of knowledge can create it. To be enjoyed it must be given; but when given it may be improved. Since the exercise of this faculty has the most intimate connection with the subject of insanity, and as the following passage owes to it much of its beauty, we cannot refrain from extracting the Professor's vivid portrait of the "Poet's Gift."

"Under proper regulation, it is to its possessor a gift of exceeding and incalculable value; so augmenting every external sense as to be like the addition of one more than is possessed by his fellow-creatures; and giving to his recollected sensations and feelings a vividness of which lower organizations are quite incapable. It imparts energy to every faculty, and, strictly guarded by their action, ministers to them even in all the business of life: it inspires the thoughts of the poet; it dictates to the orator; it breathes on the ear of the composer harmonies never heard on earth before; it directs the sculptor to the beauty which lies buried in the shapeless block, unseen by any eye but his; it cheers and supports through excitement, through anxiety, in watchings and labours impossible but for the help which flows from this eternal source; and it leads each in his own language to the expression of that ideal beauty which fills his mind, and which none else can feel or represent. In the absence of all other revelations of the Creator's will, this faculty it is which leads man, in sage or simple or savage state, to some conception, some adumbration and foreknowledge, of a state beyond this life, where what can only be felt here, may be a blest reality. Whilst to the man who possesses no imagination, a flower is a mere flower, and night and day are but a succession of light and darkness, and the landscape is but so many acres of various coloured earth; he knows only that the flowers appear because it is the season of spring, and the leaves fall because it is autumn, and the storm rages because it is winter. But the man of glowing imagination is penetrated with all the undefinable influences of external nature,—of the morning and evening, and the deep night, and of every changing season; and associates all these with those images of greatness and that unattainable moral beauty which, all inconsistent and wayward as he may be, for ever exist within his soul. He finds, in the simplest flower that blows, a volume of contemplation: the scattered leaves present him with lessons of mortality: he hears the voice of God in the wind. He penetrates to the mysterious meanings of all that meets the mortal sense, and has sympathies of thought which never yet were uttered in words. Without losing his consciousness, as men in sleep, he can exercise the boundless power of fancy in his study, or in his walks, or in the crowd; create imaginary characters, invest them with life, animate them with feelings, inform them with eloquence; or, exhausting all the materials of this world, he can wander into regions to all else forbidden: the portals of hell admit him to the dreadful secrets within; or he travels in the immeasurable spaces between the everlasting stars, and the gates of heaven turn on their 'golden hinges' to receive him." 82.

All the mental faculties may thus be most variously modified, and the result of this diversity will be that, without any mental disease, men of every variety of talent may be met with. In no such case has the healthy balance been destroyed, and therefore in no such case can the mind be considered insane, although it may be weak. Perception discerns with accuracy, memory recollects with faithfulness, judgment draws sensible comparisons upon all ordinary subjects, and imagination operates under the control of reason. A man may be born, or he may become blind or deaf, and must, therefore, be rendered incapable of drawing comparisons and conclusions between sounds or colors; but so long as the man remains sensible of his defect, and declines expressing his opinion on points with which he knows himself to be unacquainted, he is sane in mind, although impaired in sense. A lady could not endure the touch of velvet. A Russian general could not suffer the sight of mirrors. Dr. Reid had a patient, who was so averse to every thing of a light color, that he begged the Dr. to muffle his white stockings in a black apron before coming to visit him. These peculiarities depended on some defect in the organs of sensation. The apparitions of Nicolai of Berlin, and the false perceptions of Sir J. Reynolds, after being for a long time confined to his pencil, are attributable to deranged perception. A striking instance of the loss of memory occurs in the late John Hunter.

For nearly half an hour he could not recollect the name or situation of the street in which he was, nor could he even recognise it when mentioned to him. The patient mentioned by Dr. Reid, who spent all day in his bed because he could not decide upon the pair of trowsers he should put on, was a man of weak judgment. The man described by Dr. Haslam, who could not engage his attention for any time on a single point, but ran without connexion over every subject which his fancy suggested, was labouring under a defect in the faculty of association. And Ben Jonson, who kept awake for an entire night gazing at his great toe, round which he fancied he saw Turks and Tartars, Romans and Carthaginians contending, was a man of inordinate imagination. In all these instances the judgment is so triflingly and so transiently disordered, that its derangement does not amount to insanity. The transition, however, between this state of mind and that of insanity is easy and almost imperceptible. When a man can occupy an entire night in amusing himself with a visionary diorama of different nations engaged in a battle around his toe; or when he can consume an entire day, before he determines on the pair of trowsers he is to wear, his judgment is unquestionably on the verge of ruin, and differs but little from that of the man described in the Spectator, who committed suicide to escape the daily misery of tying his garters; or of the self-complacent lunatic, who believes himself a king issuing his commands to all around him with the voice of majesty.

Insanity is one of those affections which are more easily described than defined. Perhaps it may not be asserting too much to say that every attempt, which has been hitherto made to condense its distinguishing characters within the limits of a definition which can comprehend every instance of derangement, has proved unsuccessful; and when the difficulties in the way of such a definition are considered, it cannot appear strange that this should be the case. In the first place, the language which is usually employed is either in itself so equivocal, or rendered so by abuse, that misconceptions and mistakes can scarcely fail to occur. In the second place, the ignorance of most medical men on the nature and construction of mind is so general and so great, that few of them can either appreciate, or employ strictly philosophical language when on the subject of mind. And, lastly, the properties of mind are so peculiar, so diversified and so opposite to those of mere matter, with the laws and qualities of which almost all our ideas are intimately connected, and from our knowledge of which almost all our language is formed, that it is generally difficult, and sometimes impossible to employ such terms as sufficiently express even the imperfect ideas which we entertain of the laws and operations of mind. In proof of the first and last of these positions it may be observed, that melancholy, derangement, insanity, delirium, crazy, and the majority of such terms as are employed to signify a diseased or unnatural state of mind, are derived from different forms and states of matter, and are so loosely employed as to convey a very indistinct notion of the metaphysical conditions which they are intended to denote. Thus *melancholy* was adopted by the Greeks, from their belief that black bile was the cause of this disease. *Derangement* has been taken from the French, and merely signifies out of rank, or order. *Insanity* is derived from the Romans, and means simply unsoundness.

without reference to any object. *Delirium* is from "de lira," out of the track, and owes its origin to the process of ploughing, in which the horses are made to travel in a certain line: and *crazy* is from "ecrasé," which is applied to any thing shattered or broken. As to the second point—that medical men are sadly defective in metaphysics—there is we fear, but too much proof. The great mass of our profession study medicine just as the shopkeeper studies grocery, or as the artisan studies his trade, and man is regarded as a machine, differing in little from any ordinary piece of mechanism, beyond its superior delicacy or its more easy derangement. All his functions are regarded as physical processes; some of them refined and recondite it may be, but still referrible to mere material principles, because ostensibly executed by mere material agents. Chemistry can illustrate one class of phenomena, pneumatics can unfold another, while by hydraulics and mechanics, capillary attraction and elasticity we can arrive at the solution of as many more. The agency of mind, as an independent principle, is seldom thought of and more seldom known; and although, perhaps, the majority may be not only ready to admit, but anxious to maintain the compound character of man, the most active and the most influential half of him is often wholly neglected and very rarely studied, or understood. Hence is it that we are so perplexed, so confounded with unmeaning language in six-tenths of the volumes which issue from the medical press, and hence is it, more especially, that our views of insanity are so inconsistent and so incomplete. One gravely divides insanity into *ideal* and *notional*, thus giving to notion and idea, words as nearly synonymous as the English language can furnish, two very different and characteristic meanings. Another tells us that madness is false perception; a third that it is an incorrect association of familiar ideas; a fourth that it arises from intensity of idea; a fifth that it is drawing fair conclusions from false premises; and a sixth, believing that folly and madness are two very different things, teaches us their difference by saying, that a madman draws fair conclusions from false premises, while a fool draws false conclusions from fair premises. It requires some degree of fortitude to oppose the authority upon which the last definition rests; but we believe that the foundation of the distinction which has been thus drawn by Locke is fanciful. He, who draws a fair conclusion from false premises, has a defective perception; but he, who draws a false conclusion from fair premises has a defective judgment. The one is misled by the fallacious character of his perceptions of things; the other by the fallacious inferences which he makes from perceptions faithful to Nature. A man, consequently, is a fool who judges inaccurately, and a madman is insane because he perceives inaccurately. We shall afterwards, however, have an opportunity to shew that a fool is generally not less deficient in his perception than a madman, nor a madman less faulty in his judgment than a fool; that madness and folly are but *different* degrees of the *same* disorder. Beddoes might with great justice, therefore, observe that "mad" is one of those words which mean almost every thing and nothing.

"I cannot say that I obtained much help from the definitions given by different medical authorities; for not only were some of them, as Dr. Good has truly observed, 'so narrow as to set at liberty half the patients at Bethlem, or the Bicêtre, and others so loose and capacious as to give a strait-waistcoat to half the world;'* but I found that when medical

* Study of Medicine, vol. iv.

men were required to explain what meaning they attached to the word *Insanity*, they generally satisfied themselves by giving such as had been repeated by one author after another, apparently without examination; and I observed, that the practical decisions to which they were consequently led, often involved them in inconveniences, in which some had become so apprehensive as to abstain, professedly, from venturing upon any definition at all; endeavouring to content themselves, and to close the subject to all other enquirers, by asserting it to be too mysterious for man to understand. Yet I could not divest myself of the impression that the subject was not understood, only because it was not made the subject of that kind of investigation by which medical men attained a knowledge of any other subject connected with their profession; and that if they would attend more to the true physiologists of the mind, the writers on mental philosophy, who had investigated the nature and order of the mental functions, and would also observe the manner in which their own minds were exercised, they would not find it more difficult to mark and to comprehend the departures from the healthy performance of these functions, than the deviations from healthy digestion or respiration." 294.

It will be admitted that he, who requires to describe and understand diseased functions of whatever organ, should first be well acquainted with their healthy state; yet this reasoning, when applied to derangements of the mind, is equally correct and still more forcible. If the natural and healthy structure of mind be unknown; if the nature and relationship of its various faculties be unattended to; if the origin, developement and association of its ideas be unrevealed; if the extent and boundaries of its perfect action be untaken; and if it be more a subject of conjecture than of certainty, when its operations are disordered and its functions in an unhealthy state, how is it to be supposed that we can pronounce, with any satisfaction to ourselves or any safety to our patients, on either the existence, the degree, or the duration of their derangement. Dr. Conolly has, therefore, done a very important service to the profession, in calling their attention to the construction and properties of mind. By investigating its history, from its most perfect state, through all its modifications of strength, and through all its varieties of disease, until it becomes affected with confirmed madness, he has laid the ground-work of the only successful, because the only scientific mode of investigating insanity; and while he has pointed to the means of unfolding many of those mysterious arcana in the history of this malady, which have hitherto perplexed and mutilated every inquiry, he has opened up the way to a more rational, because a more metaphysical mode of treatment. The consequences which have flowed from ignorance on these points have been truly frightful. People, as safe and as sound as any of their neighbours, have been pronounced deranged, have been torn from their homes and families, and have been entombed alive within some solitary receptacle of insanity, there to consume a wretched existence in darkness and despair, frequently unpitied and not unfrequently forgotten; while others have been permitted to stalk abroad a nuisance to society and a burthen to themselves. And surely of all forms of entombment, none can be so frightful as that in which both mind and body are interred together, and in which the unfortunate and unheeded victim goes down to his living grave conscious of his sanity, yet confirming by every fresh argument and remonstrance the doleful judgment, which ignorance, or something worse than ignorance, has pronounced against him. The funeral rites of the deluded Indians are humane

on the comparison. At such triumphs of superstition life is voluntarily resigned because considered forfeited, and the surviving partner descends with the fortitude of devoted feeling into the same cemetery with the deceased. But here there is neither love, nor religion, the enthusiasm of venerated prejudice, the force of patriotism, nor the law of custom, to sanction or to palliate such an act of cruelty. National feeling and individual safety, it is true, are pleaded in excuse, and the ostensible motive for taking a step so decisive, as that of enclosing a human being for life within the walls of an asylum, is the desire of preventing the diseased from either doing injury to himself or others. But we would ask these humane life-guards of the species, what class of the insane generally occupy the cells of lunatic asylums? Are they the violently deranged? Are they such as are calculated to infuse terror or excite suspicion? On the contrary, are not the great majority of them as peaceful and as harmless as any members of society? Without cunning to devise, or power to execute any dark deed of mischief, they are often neither able nor disposed to injure, or alarm. Labouring under a kind of second childhood, many of them are much more innocently inclined than thousands going at large, without the precaution of a strait-waistcoat, or the luxury of a shaved scalp. The dangerously deranged form but a small complement of this idiotic population—not more than perhaps two-tenths—yet, according to the present system all these differently disposed and variously affected lunatics are crowded together into the same apartments, indiscriminately exposed to the same society, and to a very great degree are treated in the same manner!

Dr. Conolly defines insanity to be “the impairment of any one or more of the faculties of the mind, accompanied with, or inducing a defect in the comparing faculty.” If this definition be admitted it will involve in the charge of insanity many who think themselves paragons of wisdom, and will reduce the number of our *εοφοι* to a very lamentable fraction of the general population. Every man who cannot compare one simple idea with another simple idea, so as to draw a true and natural conclusion from them, is insane. Every vain and impertinent coxcomb, who so overvalues his own pretensions, or so undervalues those of others, as to infer his superiority; every gay and harmless belle, who can see no beauty but her own; every uxorious domesticated peasant, who considers his wife as the prettiest woman in the world; and every fond affectionate father, who regards his children as examples of amiability and patterns of talent—all these, *et hoc genus omne*, this sweeping definition will stigmatise as possessing the elements of ordinary insanity, and as labouring under the same *kind* of defect in their comparing faculty, which constitutes madness! If a defect in the power of forming just comparisons be really the essence of insanity, the truly sane will be cast woefully in the minority, as we pledge ourselves to discover more madmen in silk than in strait-waistcoats, more wrongheaded people at large and unrestrained, than immured in cells and jacketted in darkness.

The spaciousness of this definition will, probably, on all these accounts, be objected to. Every man naturally likes to limit the sphere of madness

as much as possible, and however he may be induced to consider others as "a little touched," he cannot easily be prevailed upon to think similarly of himself. Yet the principle and spirit of this definition appear well founded, and we do think that the professor has been led to its adoption from an extensive analysis of human life. In every instance of insanity which occurs to us, there has been some defect in the power of making fair comparisons; yet in strict parlance it cannot be said, that every defect in the comparing faculty constitutes insanity. To this length it is not likely the Dr. intended to go. It is the *extent* to which this defect exists which determines the person to be insane, or otherwise. A man may have a very weak and imperfect power of comparing, he may draw many false comparisons, and entertain many erroneous views; yet he may be very far removed from insanity. It is only when this power is so shattered and impaired, that he systematically misjudges upon some points, or so generally misconceives all, that no degree of public faith can be reposed in what he says, nor any confidence of security in what he does, that he can be esteemed insane, and no longer capable of occupying a place in rational society.

On points of so much abstruseness as the present, definition-making is dangerous work, and we dislike it; believing that it is quite possible both to understand and describe a point or thing tolerably clearly, without being able to define it; and convinced that, while a good definition may prevent the trouble of a tedious description, a bad one can neither serve for description, nor definition, and is only calculated to mislead. When we are told that insanity is the impairment of any one or more of the faculties of the mind, accompanied with, or inducing a defect in the comparing faculty, the phraseology is very little more than intelligible. In the first place, to think and speak metaphysically, and of course on a point of this nature, no other language than what is strictly metaphysical should be employed, there is no such primary mental power as a *comparing faculty*. The only faculty of mind, which can compare and infer resemblances or differences, is *judgment*; and every act of comparison which we make is performed by judgment. Secondly, supposing that we had a comparing faculty, what is to be understood when it is said, that the impairment of *any one* or more of the faculties of the mind, inducing a defect in the comparing faculty—*another* supposed faculty of mind—constitutes madness? Might it not be said with as much consistency, that the absence of *any one* of all the letters in the alphabet, causing the absence of *another* letter in the alphabet not included in any one of all the letters of the alphabet before-mentioned, constitutes an imperfect alphabet? The comparing faculty is necessarily included by the phrase "any one," otherwise we might say "a whole plus a part," which mathematicians would probably suspect to be but indifferent algebra! And, in the third place, we believe that insanity may occur without the derangement of any other faculty than that of judgment. Whatever *other* faculty may be affected in madness to a certain extent *judgment always* is, and hence the main principle of Dr. Conolly's definition is correct, however we may gainsay its phraseology; but we may have any one of all the other faculties affected without the judgment being seriously implicated. The man, who is defective from age in his perception, or memory, or association, may be perfectly rational. It is true, he cannot draw any comparisons between objects which he cannot accurately per-

ceive; but that is not a positive, it is a mere negative defect, and, unless the man so circumstanced should insist, either that his perceptions were perfectly correct, or that he was perfectly qualified to draw inferences from them, the mere failing in his faculty of perception would not constitute him a madman. In thus criticising the Dr.'s definition we mean neither severity, nor censure. The disease, which he undertook to define, has baffled many talented metaphysicians; and failure must be now less acutely felt, since it has been so frequently experienced. Believing that insanity is only the superlative of minor degrees of mental weakness, and that some of the elements which enter into its composition may be discovered in the most of minds, we despair of ever meeting a definition of this disease, which shall include every case, and to which no exception can be taken.

"One man suffers an impairment of sensation, sees what has no existence, or hears sounds which are unreal; and he believes in the reality of his visions, and of the sounds which come to his ears. He has, then, an impairment of *one* faculty, accompanied with a defect in his comparing powers on the subject which that impairment affects; and on that subject he is not in his sound mind. His memory, except of the false impressions, his imagination, except as regards his delusions of sense, are not affected; and in all subjects except that, he is a reasonable and sane man. Another man appears not to see what is present, or not to hear what is said to him, or not to know where or with whom he is, or how he came to be where he is, or wherefore; he has no thought of his relations, his friends, the occupations of his former life; he imagines himself a great general, or an emperor, or possessed of boundless wealth, or power; yet he is poorly dressed, his hands are confined, he is controlled by keepers, separated from all his family, and in all things guarded and watched as a prisoner, or as a child. Here we have an affection of all the faculties of the mind, that of comparison of course included; and this man is unable to exercise any of his faculties, or that comparison, on any subject; and is therefore insane on all. Between this extreme case, and the slightest case, there may be many varieties of insanity;—on one subject; on two subjects; on all the subjects of sense, and not on those placed in the memory before that sensorial delusion existed; or, without delusion of sense, an excited imagination; in fact, any affection of any one or more faculties, which is accompanied by, or induces, a defect in the comparing powers." 302.

But the man with impaired sensation, who attempts to compare two objects which are subjected to his senses for examination, must inevitably make a false comparison, and the defect in his judgment may be limited by the degree of impaired sensation under which he labors. The lunatic, who neither sees, nor hears, nor perceives, nor recollects anything distinctly, but fancies things which never existed, cannot compare properly; for he has no legitimate data for a comparison. The man, who believes his legs are made of butter, who wraps them up carefully, and surrounds them with a wooden box, cannot judge correctly; because his morbid sensations, or his diseased imagination, apart from sensation altogether, have made him to believe that his legs are not like the legs of any other person. The data whereon he is to ground his comparison are false, and there is no necessity that the comparing faculty, even supposing that there was such a faculty, should be radically defective, to account for the deficiency of the comparison. The judgment is misled by the deceptiveness of the perception or the ardour of the imagination, and the comparison which it makes is necessarily false; but beyond this sympathizing error, there may be no

radical defect in the construction of this faculty. In some cases we find one faculty diseased, in other cases several, and in some all; but whether the affected portion of mind extend to all, or be limited to one faculty, the judgment, apart from any idiopathic derangement, will be affected precisely in proportion to the impairment of the other faculties, and just in virtue of that impairment. One of Napoleon's generals thought he heard the people salute him as their king. The general's sense of hearing and, probably, his imagination were deranged, so that his judgment could not compare the evidence which his hearing furnished with that of his sense of sight, which otherwise would have rectified the fallacy. Mr. Bayle mentions the case of a lady, who put pieces of flint into her drink, believing them to be lumps of sugar. A Prince of Bourbon, believing himself to be dead, refused sustenance, and to prevent his dying of starvation two persons were introduced to him as inhabitants of the world of spirits, who invited him to dine with another of the illustrious dead—Marshal Turenne. By this artifice the Prince was preserved alive, and until this delusion was dissipated, it was found necessary to invite him daily to meet at dinner some ghost of reputation. Yet, says D'Israeli, in the ordinary business of life, the Prince was sufficiently collected to transact his own affairs. It is very difficult to say what faculty was in this instance primarily deranged but the power of comparison was on this point evidently lost, rendering it impossible for him to discover that a man, who ate, talked, walked and engaged in business, could not possibly be a subject of the realm of Pluto. A case precisely similar to the Professor's is given us by *Lemnius*; and the following still more curious instance of the same delusion may be found in *Heywood*, on the *History of Angels*. A young man believing that he was dead, abstained from food and importuned his parents that he might be carried to his grave and buried, before his body became offensive. Following the advice of his physicians he was accordingly laid upon a bier, and was carried towards the church; but the procession was met by two or three merry fellows employed for the purpose, who asked the name of the deceased; and, being told by the bearers, replied—"Well, the world is happily rid of him, for he was a man of a wicked life, and his friends have cause to rejoice that he did not make his exit at the gallows." The supposed corpse hearing this attack immediately raised himself upon the bier, and said that "he had never deserved the character they gave him, and that if he was alive, as he was not, he would teach them to speak better of the dead;" but, the men continuing to abuse him in the same opprobrious language, he could bear it no longer, and leaping down from the bier, fell upon them with great fury, and beat them till he was quite tired and convinced that he was as actively alive as he ever had been. A young clergyman, when about to be married, received the charge of a gun in his forehead. After some days of dangerous illness he recovered his health, but was deprived of his understanding. From the period of his recovery until his eightieth year, when he died, the prospect of marriage never left his sight; he talked of nothing else, and in the midst of age and decrepitude he fancied himself a young and active bridegroom. Dr. Conolly's theory of this hallucination is ingenious.

"The wound had in this case produced some change in the nervous organization, preventing, from the time of its reception, the accession of any new idea: nothing was ever

more received which could be compared with the past, nothing added to the stores of memory to be compared with former accumulations; consequently, nothing to mark the flight of time; and nothing was perceived of all those circumstances, which, if seen and compared with the single impression seemingly remembered, would have shown that since it was made years had passed away, and had wrought their usual changes." 329.

Another clergyman, on thoughtlessly swallowing the seal of a letter which he received while at table, became so frightened by his companions, who told him that it would certainly seal up his bowels, that he ever after refused food and literally starved himself. As his medical friends had administered purgatives during his illness, hoping to convince him that his fears were groundless, had this man been able to compare the nature of his supposed complaint with the character of the remedies employed for its removal, he would have been convinced that, had his bowels been so artificially confined; purgatives would have found great difficulty in opening them, or if they should have succeeded, their success would have been proof that he might have taken food with impunity. Dr. Burrows mentions the case of a lady who, imagining that a tooth, which she had extracted, had fallen back into her throat, insisted that she was no longer able to swallow, although she continued to eat and drink as usual. One man believes himself to be a teapot; another a barrel; a third thinks he has a cobbler working in his stomach; a fourth is convinced that his hips are made of glass; a fifth believes himself to be a king; a sixth thinks that he is God, or the Son of God and sovereign of all things. All these have evidently lost the power of comparison on the several subjects of their derangement, and this loss of the power of comparison arises from the impairment of one or more of the mental faculties, more especially judgment.

The author seems anxious to expose the fallacy of the general impression, that "poets are half mad," and that to become a poet the mind must be somewhat cracked. On this point we are not quite certain whether we comprehend the Doctor. If he mean to assert, and we think he does; that the first rate poet—the man of a century—is not cracked, we agree with him. But if his opinion be that all whom the world call poets, using the ordinary signification of that term, are not only perfectly sane but men of the soundest judgments, we are decidedly of another mind. Milton and Shakespear, Homer and Virgil, and perhaps one or two other favoured souls of heaven whom we are afraid to guess at, were writers as remarkable for strength of judgment and accuracy of perception, as for the brilliancy and force of their imagination. They were, therefore, neither eccentric, nor insane. Every mental faculty was duly proportioned, and every mental faculty was in the superlative degree. The ardeney of their fancy did not mislead their judgment, the brightness of their imagery did not seduce their taste, and the worlds which they created had nothing in them, which was not perfectly consistent with every object of sense. But can all this be said of the whole herd of poets? Can it be said of Dryden or of Savage, of Collins or of Cowper, of Swift or of Goldsmith, of Alfieri or of Petrarch? Can it be said of Byron, whose poetic wing rose as rapidly, soared as high, and tracked its progress with as many victories, as ever distinguished any favourite of the Muses? In short, can it be said of any save themselves? The fact is

that, with a few and a very few exceptions, the popular sentiment is an expression of the general rule, and its accuracy is too amply attested by the history of poetry. A defective judgement, or, what amounts to the same thing, an inordinate imagination is visible in every department of the poet's history. A contempt of foresight, a want of prudence, a recklessness of consequences, a thirst for pleasure, an improvidence for the future, a forgetfulness of the past, and a love for the present, constitute the leading features in a poet's portrait. And whence arise all these properties? From a deficiency in the judgement, a preponderancy in the imagination; and let this deficiency of the one and preponderancy of the other be increased, and often but a very little, and poets and poetry may be easily converted into idiots and nonsense. In what were Laura and Stella superior to the Dulcinea del Tobosa of Don Quixotte, and in what do the inspirations of Alfieri and Sacchini differ, but in degree, from the convulsive ravings of the ancient priestess at Delphi or Dodona?

Cases not unfrequently occur in which the judgement is so far injured as to make false inferences from very intelligible and simple premises, but in which an obvious struggle may be observed in the reasoning faculty to regain its influence. A man, considering himself insolvent, became deranged, and for some time laboured under the impression that he was unable to meet his creditors. By having his debtor and creditor accounts, however, placed before him, and by satisfying him that the balance was evidently in his favour, he was recovered from the delusion, and restored to his ordinary state of mind. Pascal was occasionally annoyed by the fancy, that he stood on the brink of a frightful precipice. The delusion was removed by his servants placing a chair on the supposed site of the dreaded danger.

When a practitioner is called to attend a person supposed to be deranged he has two points to engage his attention—first, to ascertain whether the individual in question be really of unsound mind; and, secondly, to decide upon the nature of the treatment adapted to his case.

"If what has been said concerning the mind in health, and concerning its inequalities, weaknesses, and peculiarities, and unsound state, contains correct views of the subject, I do not think that in any case much doubt can long exist. The patient should by all means have fair play: there should be no trick, no delusion, no artful excitement or provocation, no deception of any kind put upon him. Pains are often taken, by those who are anxious for the removal of the individual, to influence the mode of introduction of the practitioner, and the way in which he speaks to his patient; and there is no occasion on which he is more called upon, by his duty, to exercise his authority." 365.

"The fact of the patient's madness can only be established by certain tests of the manner in which his intellectual faculties are exercised, and these tests are to be found in his appearance, in his dress, in the known physical accompaniments of madness, and in his words and actions. That is the medical question. The next is a medico-legal question, and turns wholly on the disposition of the patient to injure himself or his property, or to injure others and their property; and on the probability of such a disposition, though not manifested, being suddenly developed. On the first question hangs the medical treatment and superintendence; on the second, restraint, confinement, deprivation of authority, and control over property. Medical care and superintendence may be necessary in every case; but the mistake has been to conclude, that restraint and the other circumstances are also necessary, which they certainly are not." 373.

"Let me repeat, that the medical man has a plain duty to perform, which requires no

arts of this kind. He has to ascertain whether or not the functions of the intellect are disturbed, and require the aid of medicines directed to its relief by certain effects they produce on the body: and he has to determine whether the degree or character of the disturbance is such as to make the patient dangerous to himself or to others, either as regards person or property. The decision of the first question is often quite distinct from that of the second: the interference of medicine is required in most cases of disturbed mind; personal restraint may be required in many; but the degrees of it which are required in different cases vary, as the cases themselves vary, from the slightest to the most complete; and complete restraint is very rarely required." 386.

The medical treatment should vary with the cause of disease and the nature of symptoms. One man is melancholy and morose, another is mirthful and jocose; one dwells with unwearied pertinacity upon some favorite topic, while another runs from point to point with exhaustless caprice. This man is so wild as to require restraint, that so diffident as to need encouragement. The entire mind is unhinged in one case, a single faculty is disordered in another. Is it, therefore, to be conceived that, where the manifestations and degrees of disease are so multifarious and so different, the same plan of treatment can be generally beneficial. Sometimes insanity arises from misfortune, and sometimes from prosperity; often from mental and frequently from physical causes; now it is chronic, again it is acute; in this instance it appears in an old and debilitated, in that of a young and active constitution; now it assumes a form mild and moderate, then all is violence and fury.

"When an unruly patient enters a common lunatic house, he is bled, dressed in a strait-waistcoat, has his head shaved, is subjected to the shower-bath, put upon low diet, kept in darkness, and compelled to swallow some active purgative medicine. If measures of this kind, which may be well enough suited to active delirium, do not effect any amendment, the medical resources of the establishment are at an end. Starvation, imprisonment, loneliness, and threats are then resorted to; or if the proprietor of the house happens to be very alert, some desperate, or some unjustifiable experiment is tried; whirling round upon a horizontal wheel, intoxication, or some strange method of astonishing the patient; such as loading him blindfold and headlong into a cold bath. At last peace is effected. The patient is exhausted; or his excitement is succeeded by what is called the low state; or he has learned cunning, and moderates his actions. In a few cases, the disease is soon at an end, and it is possible the amendment may be perceived, and the patient restored to his family: *possible*, but not as a general fact, *probable*; for the patient is seldom seen by those who are judges of his amendment: a few minutes every two or three days seeming to be the maximum of medical attendance in the best circumstances; and many weeks, or months, passing over in other cases, without the patient being seen by any medical man at all. Too often, the low state, considered but a continuance of the malady in another form, is succeeded by another paroxysm of excitement, and the rest of a miserable life is passed in hopeless alternations between the two." 16.

This is sad and melancholy management, and, if it do not often make more madmen than it cures, the minds of those, who are usually sent for safety to an asylum, are less insane and less easily deranged than such a measure should require. What sad routine doctoring is it to shave and bleed and imprison every unfortunate wretch, whom severe treatment may have worried into violence! The custom of subjecting all kinds and degrees of insanity to darkness, seclusion and restraint, must either have originated from

the conviction, that insanity is a hopeless incurable malady, or that treatment has such trifling influence over it, that it is of little moment what plan should be employed. The man who is idiotic and harmless can never be much improved by confinement, and neither the safety of those around him nor his own requires it. If misery, misfortune and distress have unhinged the mind, or if continued melancholy have undermined the judgement, is it rational to suppose, that a continuation of the very same causes which have induced such states should promise any thing but increased disorder? Few, we believe, have judgements so consolidated, that unfavourable circumstances may not weaken them. If this be true with respect to minds perfectly untouched, how much stronger is the observation when applied to minds already seriously impaired? What is there in an ill-conducted lunatic asylum at all calculated to recover the wandering mind? Is an undisciplined reservoir of madmen the place which should be selected for its abode; is a noisy and distracted companionship the society which should be chosen to entertain it; is solitary confinement the treatment which should be adopted for its cure? If, indeed, the case be confirmed and supposed incurable, then every plan of management may be equally availing; but if the faintest prospect of returning reason be entertained—and we ask when should it be entirely abandoned—an ill-regulated lunatic asylum is of all places for the insane beyond all comparison the worst. The Greeks sent their insane to the island of Anticyra, which was remarkable for its crops of hemlock; and there, removed from every cause of irritation and in the free enjoyment of rural liberty, many, it is reported, were restored to health.

——— *Verum ambitiosus et audax
Naviget Anticyram.*

But we have no Anticyra for our patients. We bury them in cells, exclude them from all rational companionship, crowd them together, and doubly curse them with society as irrational as their own, and we call madness a hopeless mischief which no art can cure! The dogs, which crowd our streets in a rabid state, are treated with more forbearance. They are suffered to mix with rational society; and, while a father or a husband is doomed to the dungeon and the jacket, the lapdog is kept at home and permitted to enjoy the attentions of his mistress. Except the transient voice of a passing visitor, or the authoritative accents of the keeper, these wretched outcasts from society hear little from day to day but the unconnected ravings of disordered intellects, nor do they see any thing but the grotesque and gloomy figures of the possessed. Not a word of kind encouragement, not a sentence of rational speech, not a look of condolence, nor a sigh of pity, is heard or seen. All within them is waste and vacuity and disorder, all around them is as irrational as themselves, and the errant mind is permitted to deviate, untutored and unchecked, into all the bewildering labyrinths of a diseased and capricious fancy. It may be wise to crowd our fevers into the same pesthouse, and to trammel the power of contagion by cabelling it out at sea; but it is open violation of the first principles of metaphysics, to associate every variety of mental derangement and eccentricity. Patients labouring under the same fever can communicate no injury to each other. They are all similarly diseased and similarly circumstanced, and however they might prove injurious to others, they cannot be hurtful to themselves.

But, in every instance in which mind is affected the case is different. The principal of imitation is exceedingly strong in the breasts of most lunatics; the peculiarities of one are aped by another, the contagion of example spreads from cell to cell, and where there is not a ray of reason to guide the wandering intellect from its favourite estrangement, every extravagancy is made the subject of imitation, and faculties, which were at first only disordered, become ultimately diseased. Some of these abuses are forcibly and eloquently exposed by the author; but we were somewhat disappointed on finding so small a portion of his work devoted to what appears to us the most interesting, because the most practical department of his subject. In 33 pages he discusses points which might well have occupied three times that space, and although the topics which follow lay claim to serious consideration, yet the reader can be more easily convinced of the necessity of reform and of the degree to which it should be carried, when the nature and extent of existing evils have been fully pointed out.

Even in those cases in which restraint may be rendered necessary by the violence of the symptoms, a mild and soothing manner, aided by proper medicines, will often produce a much happier effect, than constant darkness and severe discipline. If restraint be continued after the violence of the paroxysm has subsided, and the patient becomes enabled to perceive the ordeal to which he has been doomed, irritation is improperly added to distress. The very important and practical fact that insanity, even in its worst form, is nothing but the superlative of lower and less intense degrees of derangement, should never be absent from the mind of the practitioner.—If properly attended to it will inform him, that lunatics are not those anomalous phenomena in the records of disease, not those fallen stars from the sphere of reason which they have been too often wont to be considered—that they are only a few steps removed from the most sane and talented among us—that no lunatic, however violent his symptoms, however shattered his judgement, however malicious his propensities, or however reckless his passions, should be thrust forth from the world as a deadly leper, no longer tolerable in the haunts of men, as an irrecoverable alien, who has lost his social badge, and can never more be restored to the bosom of society. It will teach him to adopt every art which may banish the distracting hallucination from the mind, which may heal irritated feeling, sooth intemperate violence, encourage despondency, and bring back to soundness and to health the wandering intellect. Above all things it will convince him that restraint and confinement are among the last and least hopeful resources to which he ought to look for aid; that they are only useful by preventing danger, never by removing the disease. Unlike almost every other remedy against disease, the dungeon and the jacket are never more than negatively good. Tonics may remove debility bleeding may cure inflammation, but the cell and the waistcoat can never effect more, even when judiciously applied, than preserve from absolute destruction. Whenever this is apprehended it is wise and well to have recourse to them; but as soon as the danger has passed away, and the moment of its removal should be carefully watched, such violent measures should be succeeded by milder treatment. It is only after their employment that a cure can be attempted. While they are required curative treatment is at a stand, and it is itself no very

harmless exhibition of derangement, though perhaps not of lunacy, to expect to cure madness while jacketted in a dungeon.

"Discouragement is often thrown on *mental* treatment by injudicious attempts to act on the faculties of the mind in these cases of weakened organization. Such attempts cannot be made with success before the bodily state is improved, and, if the bodily state cannot be improved, such attempts can never succeed at all. The power must be in some degree restored before we can reasonably call for action. When some degree of power is restored, by good air, careful diet, tonic medicines, the shower-bath, sea-bathing, and attention to every article of regimen, then we may begin to exercise the faculties a little; but this must be done with the most extreme caution and tenderness. It is quite in vain to attempt to do it on any rigid and formal system. It may be practicable to day and impracticable to-morrow. Times, and opportunities, and occasions of returning strength, must be watched for, and profited by, but not too zealously or vehemently. To establish this system of treatment and watching is the duty of the practitioner; and he may establish it, if he does not send off the patient to a place in which such a system cannot be pursued. Whether it is immediately practicable to endeavour to rouse the mind, or some preliminary attention is required before such an endeavour is practicable, or whether, as will very often be the case, it is desirable to abstain from direct attempts to influence the mind, and necessary to divert it, in its weakened state, like the mind of a child, to objects unconnected with the morbid ideas;—in all or any of these cases, the patient requires that degree of care, and watching, and that medical and mental management which, difficult in any circumstances, are impossible in a house full of lunatics." 398.

By making a timely and judicious appeal to the mind Cowper was recovered from one of his most inveterate fits of despondency. A lady, who believed she saw the ghost of her husband, who was still alive, was recovered from her delusion by the husband appearing before her and entering into conversation about the affairs of their family. A man, who lived opposite the stall of a cobbler, and was accustomed to look out at him while at work, became impressed with the idea that the cobbler, in consequence of having absented himself from the stall for a few days, had been actually swallowed by him; but on giving him an emetic, and bringing the cobbler suddenly before him, as though he had been thrown up during the action of his medicine, he got better and his delusion left him. Such cases of partial derangement and of complete recovery are endless, and surely it is sad and melancholy discipline, which would restrain such monomaniacs, who are as unoffending to others as they are harmless to themselves. If a man be lunatic once a month, or once a week, or even once a day, is that an argument which should be sufficient to induce us to doom him to uninterrupted misery? The very same reason, which calls upon us to confine him during the fit, calls upon us to liberate him after it; and it is an inexcusable abandonment of all feeling to stigmatise a fellow creature with the frightful charge of madness, and to treat him systematically as insane, when, except at specific intervals, or on specific subjects, he is as sensible, if not more so than many of his neighbours who esteem him mad. Such random, routine management is sanctioned in France; but it is too gross to be tolerated in England, were its extent generally known, or its consequences properly understood. We fear that the greater part of the following passage, which appeared in the London newspapers some years ago, is still applicable. "Notwithstanding the recent regulations there are many private madhouses in the neighbourhood of the metrop-

olis, which demand a very serious inquiry. The masters of these receptacles of misery, on the days that they expect their visitors, get their sane patients out of the way ; or if that cannot be done, give them large doses of stupifying liquor, or narcotic draughts, that drown their faculties, and render them incapable of giving a coherent answer. A very strict eye should be kept on these *gaolers of the mind* ; for if they do not find a patient mad, their oppressive tyranny soon makes them so—there should be no such receptacle as a private madhouse allowed ; and the relations and friends of the insane should be allowed to visit at all times.” We do look forward with anxiety for the day, when lunatic asylums shall be managed with the same humanity, science and good sense, which have distinguished and raised the other public charities of this country above those of every other nation.

As the author very properly observes, justice and humanity are the two principles which should ever direct our treatment of lunatics. Justice will prevent us from carrying our humanity to an extent, which might endanger the safety either of property, or life ; and humanity should induce us to do every thing for the comfort, as well as for the cure of the deranged, which is not incompatible with either of these objects. Enough, we presume, has been said to show that the present system of treating the insane is woefully deficient in both these points, and if the objections which have been urged against it have been well grounded, the mode in which some of them may be obviated it will not be difficult to lay down. If it be an error to entrust into the hands of non-professional men the charge of insane people—if it be an evil to associate lunatics with lunatics, without any respect to their different forms, or degrees of lunacy—if it be a defect to have lunatic houses in the uncontrolled possession of interested men—and if it be true that the present system of seclusion prevents even professional men from studying with proper attention the nature and cure of lunacy—surely these are evils well worth the people of England to investigate and to rectify, as well from the sad extent to which they are carried, as from the disastrous consequences to which they tend.

The substance of the arrangements which the Professor adopts to effect all these objects is—to place all insane persons under the care of the state—to have a lunatic asylum in each county, two in London, and one, if necessary, in any large provincial town—to have small lunatic houses in the neighbourhood of each of these asylums, which should be under the same government with the larger houses, and into which such patients might be admitted as require removal from home, but whose friends are averse from sending them to the asylum—to make every lunatic asylum the property of the state—to send no lunatic to an asylum, except it were found from his relatives and friends that he could not receive proper care elsewhere—to make every lunatic asylum a school for the knowledge of lunacy—to have all the officers of these asylums appointed by, and under the control of the Secretary of State—to attach to every asylum a certain number of medical officers and keepers, who should be ready at all times to attend insane patients in their own houses—to give notice at the public asylum of the district, as soon as signs of insanity appear in any person, and, if a keeper be required, to have a certificate to that effect signed by the medical attendant on the patient’s family, and some of the medical officers of the asylum—to keep

a register of every insane person, whether in or out of the asylum, and to have the out-patients visited by a medical officer from the asylum, at least twice a month in chronic, and once a week in recent cases—to have non-professional men as visitors attached to each asylum, who should visit the patients in the asylum once a week, those out of it twice a month, and make a monthly report of the state of each—to prohibit the reception of lunatics into work-houses, or houses kept by persons interested in keeping lunatics and to punish all instances of concealment—to so separate the insane, that no society could be held between the deranged—to allow each lunatic a keeper, who should be with him a great part of each day, to converse with, sooth, amuse, and instruct him—to open every asylum to the public from two till four, p. m., three days in the week, a keeper or house-pupil going round with the visitors—to allow free access to the friends of the insane—to have divine service regularly performed in each asylum—to lay before the Secretary of State every quarter a report of the number of patients admitted and discharged from each asylum, with the names of the out-patients and visitors.

How far these suggestions might tend to obviate the evils which have been pointed out, the reader may now be tolerably well prepared to form his own conclusion. It appears to us that, although strong exceptions may be taken against many of them, their general principle is excellent. The preposterous custom of delivering the insane into the hands of men, whose utter ignorance of mind, as well as of bodily disease, disqualifies them from taking charge of patients, who require both medical and metaphysical treatment, would thus be abandoned, and interest would be no longer allowed to traffic with liberty and life—professional men would be furnished with the means of studying every form and modification of insanity, and of preparing themselves for meeting and managing it in private life—the peculiarities, tastes, habits and propensities of individual lunatics would be carefully consulted, and every light which they might cast upon the nature of their derangement could be made available—friends would confide with comfort and satisfaction in the integrity of those to whose care they had committed the insane, and the insane would look with confidence and affection on their attendants, as men uninfluenced by any other motive than that of discharging with humanity and success the important duties which devolve upon them. If any thing can solace the mind of a lunatic during the lucid intervals with which he is occasionally blessed, and can reconcile him to the sad bereavements which he is doomed to suffer, it his conviction that, when his lights have been extinguished and he lies helpless and hopeless upon the surge, there is a skillful hand prepared to rescue him from the tempest, or, if unable to save him, anxious to assuage his misery and to sooth his mind. And when it is remembered that the most furious insanity differs only in degree from passions, emotions and propensities, which the wisest among us are hourly betraying, and that the transition between a harmless oddity and a pernicious hallucination is as short as it is easy, those, who are blessed with the richest gift of heaven, should look with any other feeling than one of ridicule or indifference upon the distracted lunatic, and should hail with encouragement every plan which furnishes the faintest hope of ameliorating his condition, and of restoring him to reason. Dr. Conolly has espoused the interests of this most destitute class of the human race, in a style and with a

talent which are equally creditable, and we do earnestly beseech every friend of humanity and every advocate of improvement, to weigh the alterations he suggests, to consider the errors which he exposes, and to add their influence to his efforts for the relief of those, who of all patients are most unqualified to relieve themselves.

The language and style of this work are superior—very superior to those of any modern medical publication with which we are acquainted. Several of the propositions are, we think, Utopian—and on the whole, the materials are much inferior to the workmanship.

II.

CLIMATE OF THE NEILGHERRY, OR BLUE MOUNTAINS OF COIMBATOUR, SOUTH INDIA. By *James Hough*, of Madras. Octavo, pp. 172. Hatchard, 1830.

THE baleful influence of an East-India climate on the constitutions of our countrymen and women is now too well known. This it is which often compels many valuable public officers prematurely to retire from a service, in which all their temporal hopes were centered—and that perhaps, at the very time when their opening prospects were beginning to reward their toils and their assiduity. To men rendered incapable of performing their duties, suffering from disease of body and depression of mind, it must be no trifling gratification to know that, within the territories of British India, there exists a region singularly salubrious, romantic, and beautiful, where they may, with safety and with little difficulty, retire to recruit their health and vigour, without the misery and expense of time and money attendant on a long sea-voyage to Europe.

The Neilgherries were scarcely known before the year 1819, when several gentlemen, then residing at Coimbatour, explored them, and published some accounts of these singular mountains in the India newspapers. These mountains are situated to the north-west of Coimbatour, about eleven degrees from the Equator, and ranging 40 miles in length by 15 or 20 in breadth—the highest part being about 8000 feet above the level of the sea. The following extract from the letter of a medical gentleman, who examined the topography of this region, will be read with interest.

“The salubrity of this climate has now been fully ascertained. The incredulity that for some time prevailed on the subject was noticed in my first communication; and, considering the general prevalence of fever in mountainous regions throughout India, it must be conceded that a degree of scepticism was, for a time, not unreasonable. But it is quite inexcusable to remain incredulous after the numerous favourable reports that have been made by eminent medical officers. However, I will endeavour to enable your readers to draw the same conclusion: for this inference may be anticipated from every reasonable man, that if my description of the country be correct, *it must be the region of health*.

In the first place, it is entirely free from those morasses and vast collections of decayed vegetables that generate miasma, which some are of opinion, is the principal cause of fever in other mountainous regions of India. This cannot be said indeed of the *passes* to the Neilgherries throughout the year; since, from February to May inclusive, their

climate is as insalubrious as that of other parts of the Ghauts. But no inconvenience is to be apprehended from passing through them even at that season, unless the traveller be so imprudent as to halt there during the night and sleep; and as this may always be avoided by starting at a proper hour with sufficient means of conveyance, the existence of fever in the passes forms no exception to the favourable character given of the climate at the summit. During my residence there, two cases of the kind occurred, both which appear to have been occasioned by zeal for the public service, which detained the gentlemen longer in the unwholesome parts, than was, perhaps, absolutely necessary. However, on re-ascending the hills, both recovered." 28.

The fatal cholera has never ascended these mountains. In equability of temperature, this place surpasses that of any other country with which we are acquainted. The average range of the thermometer is about thirty degrees below that of the adjacent coasts of Malabar or Coromandel.

"In 1825, the frost commenced on the 11th of September, and prevailed, with some intermissions, until the end of the following March. This was unusually early, as it does not often appear before the middle of October. The sight of the ground covered with hoar frost is highly gratifying to an Englishman, as it revives pleasing associations that had, probably, not recurred to his mind since he left his dear native land; and, if I may be allowed to judge of others by myself, he is not displeased to have his fingers pinched by the frost, at least until this sensation ceases to be a novelty. The pools and sides of streams in the valleys are frequently covered with a thin coat of ice, which for some time resists the influence of the sun's rays. Standing water is generally frozen, and on the 13th of February I found some ice an inch and a half thick." 37.

The scenery of this interesting country it is difficult to describe in adequate language.

"It presents very little of that bleak, rugged, and barren appearance which is common to most other mountainous regions. Peringa and Maika Naads, are composed of mountains which vary greatly in their elevation. Some of these eminences are almost perpendicular, towering to the clouds, and descending in deep and terrific precipices. Their sides are occasionally bare, but more frequently covered with fine grass, a rich profusion of plants, and a short brushwood, with almost every variety of fern.

Numerous streams are seen meandering through the valleys, and might easily be turned in all directions to irrigate the fields that skirt their margins; but the inhabitants avail themselves very little of this advantage. The bold eminences are surrounded by smaller hills, whose gentle declivities are adorned with patches of cultivation, and whose ravines are filled, and summits often crowned, with groves of majestic trees." 20.

We shall conclude this short notice of the "Blue Mountains" of Hindostan with the following extract.

"It appears by the registers which accompanied my third letter, that the *maximum* heat in the shade, at noon, during fourteen months, was 63° Fahrenheit. The thermometer rarely stood so high. The average for the year has been ascertained to be about 56½°, whilst the extreme variation is only 12°: that is from July to March the thermometer will occasionally stand at noon, both in and out of doors, at 56°; during the remaining three months it will rise as high as 68°. There are exceptions to this estimate; the general rule is, that the thermometer does not vary two degrees, very often not a line, in a well-sheltered house, during the twenty-four hours. A visitor was once so struck with this fact, that

he seriously asked whether any thing was the matter with a thermometer which hung in his room, as he had never observed the mercury to move during his residence here. The temperature before sunrise is seldom above 50°. For many months in the year it sinks to the freezing point, occasionally below it. It was marked at 19½ for three successive mornings of December 1825. Occasionally frosts are seen as early as September, and in every succeeding month until April, in the absence of rain. At times the sun is felt to be extremely oppressive in situations sheltered from the wind; but the thermometer rarely indicates a heat above 76°. The interposition of a cloud or a passing breeze, reduces the temperature considerably. Exercise may be taken on horseback by persons in health, at all hours of the day.

During the prevalence of both monsoons, that is, from the middle of June till the middle of December, very boisterous and unpleasant weather is occasionally experienced. It seldom, however, is so bad as to prevent a person from going abroad during some portion of the day. The nights are uniformly cold, so that blankets for the bed can never be dispensed with, and fires in the morning and evening are comfortable during a great part of the year, and occasionally throughout the day. These are the results of seven years' experience of the climate of the Neilgherries. In what other part of the globe is such a climate to be found? Certainly not at the Cape, where the benefit derived by invalids in the cold season is very generally lost in the hot. The same remark applies to most parts of the Isle of France. In the south of Europe, in France, even in our own country, summer heats are occasionally excessive, and the variations of climate throughout the year very great. The temperature of Van Dieman's land appears to approach nearer to that of the Neilgherries than any other we are acquainted with; but an attentive comparison of their thermometrical registers kept there will show, that even that highly favoured region does not possess a climate at once so equal and so cool throughout the year as that of these mountains.

We have then, within our own territories, a region blessed with an unequalled climate, highly beautiful and fertile, and of easy access from all the Indian Presidencies. By a road which is now in progress, the distance from Ponnany to the most elevated part of the Neilgherries that is inhabited will be about eighty-five miles. Ponnany is a sea-port on the western coast, about thirty miles south of Calicut. An invalid, therefore, leaving Calcutta at any time after the rains, would have a fair-weather voyage of fifteen or twenty days, at an expense of two hundred rupees, to the coast; and from thence, four very easy night-journeys in a palankeen would carry him to the summit of the hills. From Bombay the sea-voyage at the same season would be made in less than half the time. During the prevalence of the south west monsoon, the most eligible place of landing from both Presidencies would be Negapatam, on the eastern coast, which is eighty miles distant from Trichinopoly; and the traveller would be conducted along two hundred miles of good road, and through a populous country to the hills." 132.

There is reason to believe that the Neilgherry Mountains will prove of more importance to Britons than may, at first sight appear. There are many people in India who have no wish to revisit their native soil—still more who dread its climate, after a long residence between the Tropics—and others still, who have not the means to return home for health. To all these, the Neilgherries present a desirable retreat in which to spend the remainder of their days, or recruit those powers of the animal machine, and even of the drooping spirit, which have been prostrated beneath the burning suns of our Indian possessions. The easy access to such an "ASYLUM OF HEALTH," too, must prove a great source of consolation and hope to those who are embarking for the shores of Hindostan.

III.

A TREATISE ON THE NATURE AND CURE OF THOSE DISEASES, EITHER ACUTE OR CHRONIC, WHICH PRECEDE CHANGE OF STRUCTURE; WITH A VIEW TO THE PRESERVATION OF HEALTH, AND PARTICULARLY THE PREVENTION OF ORGANIC DISEASES. By A. P. W. Philip, M.D. &c. Octavo, pp. 432. Longmans, 1830.

We entirely agree with Dr. Philip in the following sentiment, with which he opens his work :—"I believe a physician who has been long engaged in practice, cannot better promote the objects of his profession, than by simply relating, with accuracy, the facts he has himself observed, and the reflections they have suggested." This we believe, provided the execution be conformable. But if, in laying open this experience and these reflections to the world, we hope or expect to make the non-professional public anatomists, physiologists, and physicians, we shall lamentably expose the vanity of our enterprise. In such an undertaking Dr. Philip embarked, when a few years ago, he attempted to make "the laws of the vital functions"—laws which are very imperfectly known to physiologists themselves—a part of general science, and consequently the study of general readers. These are his own words, in the preface before us. "In the introduction to the third edition of my Treatise on the Vital Functions, which may rather be considered as belonging to general science than exclusively to medicine, I gave such a view of the functions of the animal body as would enable the *general reader* to understand all that is said in it, and, consequently in the present Treatise. I have endeavoured, however, to render the practical, that is the second part of this Treatise, intelligible to those who do not possess even that knowledge of our frame." Thus in even an INTRODUCTION, Dr. P. conceives that he has enabled the *general reader* to understand all the "laws of the vital functions."—while the second part of the present work—namely, the *treatment* of diseases is rendered, or supposed to be rendered, intelligible by the same class of readers, even without the knowledge of the vital functions.

Now, the total failure of the first enterprise, as his publisher's shelves can attest, might have moderated Dr. Philip's zeal in the illumination of the PUBLIC, or even checked the overflowings of his philanthropy in rendering them independent of doctors as well as of diseases—for we will venture to affirm that not 20 copies of the "VITAL FUNCTIONS" ever travelled beyond the boundaries of the profession—except as donatives—and that not twenty individuals ever read—nor one understood, a fiftieth part of these vital laws. No verily! The SCIENCE OF LIFE is studied in a very different manner by the public large. They are much more inclined to pick up its precepts in the "HEART OF MIDLOTHIAN," or "TOM AND JERRY," than in the dissecting room, or in the fair pages of Dr. Philip's "THIRD EDITION." We should like to hear Dr. P. catechise his brethren of the Royal Society respecting the "laws of life;"—some of them, at least, would answer him in the laconic words of an ancient poet—

"Vitam faciunt BALNEA, VINA, VENUS."

The Royal Society indeed, and the Quarterly Review, appear to have turned the brains of two very clever physicians—Drs. Philip and Unwins—for ever since the said SOCIETY and the QUARTERLY did these physicians the “honour” of publishing their lucubrations, the ears of the profession have been stunned with the eternal reiterations of the said “honours.” Our author informs us that though he was a compiler from the works of others, in early life—(and we think a very respectable one, as evinced by his *Treatise on Febrile Diseases*), yet he has “made use of none in the composition of this *Treatise*”—that is, none but his own—these being now so numerous as to form a sufficient library of reference for himself at least. And truly Dr. Philip is by no means chary in his references to former publications. The procedure is extremely politic, and is one of the most ingenious and clever modes of evading the advertisement duty, with which we are acquainted. It perpetually jogs the flagging memory of the public towards our past labours—for no writer knows better the truth and force of the following precept than Dr. Philip.

Men must be taught as if you taught them not,
And things long known proposed as things forgot.

“In my late publications, my objects have been to state my own observations, and the inferences to which they have led me: and, as many parts of the present *Treatise* relate to the subjects of these publications, the various papers which the Royal Society have done me the honour to publish, a *Treatise* on the Vital Functions, and that on Indigestion, it was necessary either to repeat what I had already published, and swell this volume to too great a size, or frequently refer to them. This will explain my frequent reference to them, and, I hope, be my apology with the reader.” *Pref. x.*

Whether this frequency of reference indicates any secret misgiving in the mind of the worthy author, that the MEMORY of the public is a treacherous jade, or rather JILT, ever ready to coquet with a new, and forget an old face, we shall not venture to determine; but if these frequent references induce the readers to drink at the fountain head, and consult the originals, Mr. Underwood may set up his carriage at once.

Dr. Philip forewarns us that “he shall indulge in no speculative doctrines, but wholly confine himself to facts which came under his own view, and the necessary inferences from them. Under this last title, the author knows well that he may speculate as widely as he pleases. He “avoids the narration of cases”—though these are the most substantial kind of facts—and as “the purposes (of this *Treatise*) would be very imperfectly answered, were it not made intelligible to the GENERAL READER, he shall, as far as he can, avoid the use of technical language.” And has the lecturer, the experimental physiologist, the long-established practitioner, the wealthy and independent physician, condescended at his time of life, to throw aside the language of medical science—to turn his back upon the profession—and address the mob?—And for what purpose? For the avowed purpose of enabling general readers to comprehend all that he has written on the vital functions, on indigestion, and in the present *Treatise*! Yes! To make the non-professional public intimately acquainted with the symptoms and the treatment of those obscure, proteiform, and almost incognizable deviations from sound health, or approaches to disorder, which often elude the eye of the most observant physician, or baffle his skill when detected, is

the professed object of the volume before us! We can scarcely reconcile such an extravagant, unfeasible attempt, with that prudence which generally accompanies grey hairs—and Heaven forbid that we should suspect Dr. Philip of having any other object than the one which is proclaimed. But, while we absolve the author from all selfish *motives*, we must and do impugn his judgment, in thus appealing from the profession to the public at large—and in thus attempting to force the study of diseases and the methods of treating them down the throats of non-professional readers.

A physician may now, as did Hippocrates, of old, write popularly on various points of hygiene, such as the salubrity or insalubrity of the air we breathe, the food we eat, the water we drink, the raiment we wear, the avocations we pursue, &c. These are subjects in which all are concerned, and which all may study; but if a physician writes a treatise on the nature, causes, and treatment of diseases of the brain, the heart, the lungs, the liver, and the stomach—and tells the general reader that he has rendered *all* that is in his book perfectly comprehensible by him, without the labours of the dissecting-room, and the bad air of hospitals,—then we say that the physician who believes that he can do what he thus promises, must be insane—if he do not believe it, he is, to say the least, disingenuous.* But we do not think that Dr. Philip is either insane or knavish—he is only very CUNNING. He has lived long enough in this world to know that flattery is the best unction for the soul—and that a little innocent flattery applied to the understanding of the public at large, will greatly prepossess them in favour of his lucubrations—without doing the least harm, but probably good to the profession at large, since it is not very likely that general readers will make better general practitioners than those who have been all their lives at the bed-side of sickness—indeed it is reasonably to be expected that, should the Doctor's book become epidemic in this country, the medical practitioner will seldom have an opportunity of prescribing for those “diseases which precede change of structure,” since the organic affections will be all ready prepared for him by the patient, upon the soundest canons in the Philippian code of health and longevity.

We should not indeed be much surprized if Dr. Philip was all this time laughing in his sleeve at the HOPES which he has excited in the general public that they will get rid of the Doctors—and the FEARS which he may call forth in the professional republic, of losing their practice—well aware that his work will disappoint both parties—the latter somewhat agreeably by adding considerably to their revenue.

A medical writer, who addresses himself unequivocally to the general reader, and, adapts his language and consequently his materials to the non-professional scale, cannot expect a very extensive perusal by his own profession, who look to a higher species of information than can be conveyed to the patients whom they attend. It cannot, indeed, have entered into the designs or wishes of Dr. Philip that his book should circulate within the pale

* We ask Dr. Philip this simple question:—if the general reader can understand *all* that is contained in his treatise, respecting diseases and their cure, why should that general reader apply to him or to any other medical man, for knowledge or advice which he already possesses?

of medical society—for he, at least, must be conscious that almost the whole of the present treatise is composed of fragments from his former works, sometimes cemented together very roughly—sometimes melted down, and the same materials moulded merely into new forms, on the approved recipe of the Roman poet—

*In nova, fert animus, mutatas dicere formas,
Corpora.*

To say the truth, Dr. Philip is not singular in this method of multiplying literary bantlings without any new births, but merely by fresh christenings; yet such procedure is very disadvantageous to medical literature, already overloaded with masses of useless, indeed cumbrous materials. On this account, we are well aware of the extreme difficulty which we should encounter in making even a tolerable article for our review out of 430 pages of goodly octavo. Still we must notice the book—since any work emanating from so justly esteemed a writer as Dr. Philip, even when addressed to the populace, is entitled to examination.

The first part of the work is on the nature and symptoms of those derangements which precede change of structure—a strange and quaint title for a book, since it must apply to, or include almost the whole range of nosology. This, however, is of little consequence.

Dr. P. observes, that many people mix in society, under chronic affections, which steal on by degrees, and thus produce a gradual accommodation of the feelings and functions to a state which, had it suddenly occurred, would have unfitted the individual for social intercourse with the world. These incipient deviations from health are sometimes the consequence of acute attacks of disease—sometimes arising from imperceptible beginnings. They are classed by our author under the three following heads:—

“General debility accompanied by a state of inanition, the consequence of a general failure of power in the various processes by which our food is converted and properly distributed; general debility accompanied by a state of plethora, from a failure in the power of those organs which throw off from the system what is no longer necessary, and soon becomes injurious to it; and, lastly, a greater or less failure of function in some particular organ essential to life.” 6.

The first of these states is considered by Dr. P. as extremely rare, as a permanent affection. It occurs occasionally after the severe shock of an acute disease, when the system appears not to receive due nourishment. This state lasts not long. The patient either rallies, or some local disease is set up in the weakest part.

“General debility accompanied by plethora, on the contrary, is one of the most common as well as insidious forms of permanent chronic disease. I regard it as a state of general disease, because it affects equally every part of the system; although, in considering its causes, it will appear that in most cases, it is in the first instance, a disease of the excreting organs.” 8.

Those who are acquainted with the writings of the late Dr. Parry, will remember that the above is one of his fundamental principles of pathology, and is not, therefore, so original a proposition as Dr. Philip may suppose. We have indeed generally remarked, that those who consult least the works of others, shew least originality in their own writings. The reason, we think, is obvious. Acquaintance with what has been put on record enables us to discriminate what is original from what is second hand.

Dr. Philip justly remarks that although the animal body is fruitful in resources, it cannot provide against all contingencies. One man may eat and drink double as much as his neighbour, and may still be in as good health, if his excreting organs are in a state of activity, and carry off a proportionate superfluity of nutriment. But the pleasures of the table, in civilized life, not only provoke to too much ingestion, but, by impairing the tone of the excretory organs, check the salutary office of the waste pipe. There is some questionable pathology in the following quotation.

"Contrary to what we should at first view suppose, it is in those who have naturally the smallest appetites that states of plethora are most apt to arise. Except as far as we are influenced by a wish to gratify the palate, our desire for food is proportioned to the demand for it. In those constitutions where the excreting organs—and particularly the skin, which is the most extensive—are in a state of greatest activity, the greatest supply is required, and any morbid accumulation least apt to arise. In those whose excreting organs are languid, a less supply is necessary, and an accumulation more apt to take place. Those who naturally eat little, for the same reason, are generally also *fatter* than those who eat a great deal." 10.

There can be no doubt that those who use active exercise, and whose skin and secreting organs are in full force, require and bear much more food than those who are weakly; but we ask Dr. Philip, is it generally among those weakly persons, with puny appetites, that we see apoplexy, aneurisms, hypertrophy of the heart, and other unequivocal states of great plethora? The last part of the quotation would seem to infer that obesity is the consequence of little eating—whereas we should be more inclined to reverse the proposition. The fact is, that idleness and good living will cause obesity, or some disease in the majority of people—and, on the other hand, paucity of food will generally lead to paucity of fat.

Passing over a number of trite and obvious truths, which it must have been wearisome to write, and would be unpardonable to repeat here, we can only now and then catch a passage capable of exciting the slightest attention.

"The chief indications of a plethoric state of the system are a languor and sluggishness both of mind and body, and often a distressing sense of debility even in slight exertions. Those parts of the body where the vessels are most superficial, the cheeks, eyes, &c., often become redder than usual; and flushings, often followed by some degree of perspiration, are not unusual.

But a state of plethora may exist without these latter indications; for it seems sometimes to happen that, without any determination of blood to a particular organ, the more internal vessels become loaded, while those of the surface appear no more charged with blood than usual: and the opposite of this state sometimes exists; the external vessels being more charged than those of internal parts, and a red and turgid countenance, which suggests the idea of threatened apoplexy, will continue for many years; and that, where the causes of plethora continue to be applied without symptoms of internal disease, and seems even to be a means of prevention—the external vessels affording a receptacle for the superabundant blood, and thus tending to prevent morbid distention of those more internal." 16.

We suspect there is more of fancy than of fact in the idea that a red face, turgid countenance, injected vessels, &c. are not merely indications of an easy circulation internally, but preventives of plethora in the vessels of the

viscera. True, we see men go about for years, with the turgid faces alluded to; but the question is, are such people less subject to apoplexy than the pallid and meagre-visaged? We apprehend that very few will draw the inference which Dr. Philip has drawn. We were going to call it a theory—but Dr. P. has declared that he indulges in *no speculations*. Nothing but facts!

Dr. Philip; indeed, seems to delight in dwelling on the exceptions to general rules, rather than on the general rules themselves. Thus, at page 25, he says:—

“In healthy habits, although the immediate effects of blood-letting is to lessen the quantity of blood, its tendency, by the general check it gives to the action of the various excreting organs, is to increase it. Thus butchers bleed animals to fatten them.”

One or two bleedings, in healthy habits, might have such effects as are above stated; but let the healthiest man lose an ounce or two of blood daily from the hemorrhoidal vessels, or other outlet, and we shall see whether he will fatten or get thin and pallid—perhaps dropsical by the bleeding. Although Dr. P. has addressed his work to general readers, we are confident that not one in one hundred of them will understand a word of what he has said about plethora, and congestion, and capillary debility, &c. in his first chapter. The same remark is still more applicable to the second chapter, on “The Powers of the Nervous and Vascular Systems, and the Relation they bear to each other.” What he has here laid down is known already to physiologists—and never can be beaten into the heads of general readers—who, indeed, would be great fools for studying any such matters. The “Vital Functions,” however, and the “Philosophical Transactions” have enabled Dr. Philip to fill up very easily 54 pages of letter-press, constituting the second chapter of the work before us.

The third chapter is on “Some of the More Acute Diseases of the Brain.”

Our author divides the occasional causes of diseases of the brain into those which morbidly excite, and those which morbidly depress its powers. He then takes a very cursory view of the effects of these two sets of causes.

“When the brain is exposed to a highly exciting cause, from the immediate influence of this organ on the heart and blood vessels, they also are excited to increased action. If the cause be of a transitory nature, and not excessive, little other sensible effect ensues. As its influence subsides, the functions of the brain and sanguiferous system return to their usual state.

When it is excessive, though of short duration, other consequences sometimes ensue. The blood is conveyed to the head by vessels subject, of course, to the same affections as those of other parts of the body. When the sanguiferous system, therefore, is preternaturally excited, they partake of this increased excitement; and by this cause, combined with the increased action of the heart, a greater than usual quantity of blood is sent to the head: but as the blood is returned from the brain by membranous canals which cannot partake of this excitement, a tendency to accumulation of blood in the head takes place; which is much increased, if the occasional cause has been of such a nature as at the same time to excite the muscles of voluntary motion; whose action, by pressing irregularly on the veins, in consequence of the valvular structure of these vessels, greatly increases the rapidity of the circulation.

An increased accumulation of blood in the brain, within certain limits, for the time in-

creases its energy; and both the valvular structure of the veins in the limbs, and the inextensible nature of the canals just mentioned, appear to have for their object, that the vigour of the brain should be temporarily increased under strong exercise, and the influence of certain passions, in proportion to the increased demand for it. This temporary increase of excitement in the nervous and sanguiferous systems is succeeded by a proportional depression in the powers of both.

It sometimes happens, during the state of excitement and consequent turgescence of the vessels of the brain, that one of these gives way; and, blood being effused on the surface or in the internal parts of the brain, this organ is so compressed as to become suddenly incapable of its functions, and one of the most fatal forms of apoplexy ensues.

When, without rupture of the vessels, the brain is so compressed by their morbid distention as to become incapable of its functions, an apoplectic state in like manner ensues; but which after the cause of the excitement is removed, if the constitution be otherwise sound, disappears spontaneously. I knew an elderly gentleman, stout, and of a full habit, who laboured under hooping-cough, and every return of cough left him in a state of insensibility on the floor. He, however, passed through the disease without any serious accident, and enjoyed his usual health after it.

When such distention of the vessels arises from more permanent causes, or the vessels of the brain have been previously debilitated, the result is more serious, and constitutes one of the most frequent forms of apoplexy; the recovery from which depends on the vessels, when being relieved from the superfluous quantity of blood, recovering and maintaining their vigour, and consequently their healthy diameter. But it is not unusual, when a plethoric state of the head has been habitual for some time previous to the apoplectic attack, and the vessels consequently have been debilitated, for the patient several times to revive on abstraction of blood; but constantly to relapse into the same state, as the vessels again allow themselves to become morbidly distended, till, the powers of the constitution being exhausted, death closes the scene." 91.

From this extract—one of the most strictly medical in the work—our readers will see a specimen of that dead sea through which we are obliged to wade, in search of what might be reasonably expected from the pen of an eminent English physician in the nineteenth century. From page 90 to page 136, we have not been able to find a single sentence which would be worth the trouble of transplanting to our pages—and how the talented writer was able to weave so long a tissue of narcotism, as the present volume presents, without falling into irrecoverable coma, we are utterly at a loss to conjecture. If general readers can study the 3d, 4th, and 5th chapters of the work before us, without falling into a profound sleep, they may take, with safety, but without any effect, a full ounce of Battley's XX liquor opii sedativus.

The 6th chapter is on the Morbid Affections of the Heart which precede Change of Structure.

The heart, says Dr. Philip, "has but one function, that of impelling the blood." "A necessary consequence of the simplicity of its structure and its function is, that, *its diseases are also simple.*"

"They may be divided into two classes,—those which weaken the power with which it propels the blood, and those which impede the passage of the blood through it. The former, the diseases of the substance of the heart itself; the latter, of its orifices and its valves." 137.

Whether the heart be incapable of propelling the blood from weakness of its structure, or imperfection of its valves, the effect must be a *diminution*

of the force of the circulation. And thus the immense class of diseases arising from hypertrophy of the heart, and inordinate impulsion of the blood, is, at once, swept from the chart of pathology—and that by a metropolitan physician of the present time, who never once even alludes to auscultation in his treatise!! It would be an insult to our readers to dwell, for a moment, on this astounding proof that Dr. Philip has ceased to keep pace with the progress of science, when he has ceased to consult the labours of his contemporaries. This is one of the blessed fruits of wrapping ourselves up in self-experience—or rather self-conceit, and shutting the eye and ear against every thing that is going on beyond the circle of our own practice. Is it not astonishing that men will come forward in the character of authors, who tell us they never read—and consequently (we must infer) that they condemn reading—and yet modestly expect that all others shall read *their* productions! We entreat the reader's attention to the following extract.

"In such a treatise as the present, whose objects are, to detect the *first beginnings of organic disease*, and point out the means of obviating them, it would be of little advantage to dwell on the *simple organic diseases* of the heart; because they *betray themselves by no symptoms till they have made such progress that we have no means of arresting them*: and the same observation applies to the *organic diseases of the aorta, and other large vessels attached to the heart*.

But although we have no warning of the approach of *simple organic disease of the heart*, and therefore can lay down no rules for its prevention, as *organic disease* is sometimes the effect of *other diseases of this organ*, which may both be detected and relieved, these diseases are the proper subjects of such a treatise." 137.

In the whole course of our lives we never read such a jumble of absurdity, contradiction, and *bad physic*, as the foregoing extract contains. We were first told that the diseases of the heart were *simple* (certainly a very simple enunciation) on account of the simplicity of its function and structure. In the very next page, we are informed that simple organic diseases of the heart (the only ones that can exist according to the preceding proposition) *betray themselves by no symptoms* till they are irremediable;—and then we are told that *organic disease* is sometimes the effect of *other diseases of this organ*, (!) which can be detected and relieved! Not the least notice is taken of that gradual accretion of the pericardium to the heart, or of that gradual increase of thickness in the parietes of the heart, producing such fearful and injurious disturbance of function in various other organs of the body, and ultimately death. Not a word is said about the detection of these and many other insidious diseases by auscultation. No! A few trite observations on inflammation of the heart, taken chiefly from his own compilation made 30 or 40 years ago, in Edinburgh, fill up the remainder of this sixth chapter, and offer a lamentable specimen of British pathology, diagnosis, and practice in the year 1830!

We now come to the 7th chapter of the work, on disease of the lungs. Dr. Philip observes that it has been thought by some that tubercles may sometimes arrive at a state of magnitude or growth which will defy our remedies, without producing any symptoms by which they can be detected.

"If this ever happen, which I greatly doubt, it must be very rarely; because I have found that, in the *most consumptive habits*, the first symptoms can generally be checked, and *perfect health* re-established." 155.

This indeed is consolation! Perfect health can be brought about in the *most consumptive habits*, by Dr. Philip, when the early symptoms are seen by our author! Dr. P. does not believe that those predisposed to consumption are born with the seeds of tubercles in their lungs. It would be vain to tell him that the actual tubercles themselves have been detected in the lungs of the *fœtus* in utero, and of the infant newly born.

"We may, therefore, very confidently assume—and at all events they are the safest assumptions—that *disease of the lungs never exists without betraying itself by evident disorder of their function*, and that, at the commencement of the symptoms, the lungs contain neither tubercles nor their seeds. And the opposite assumptions are so gratuitous, that, as far as I know, not even an attempt has been made to adduce a direct proof of either. *Tubercles, I believe, are always the consequence of some occasional cause, and, in the first threatenings of the disease, may generally be prevented*, however strong the disposition may be, by correcting the symptoms which precede them." 156.

Is it not rather surprizing that disordered function of the lungs should be evident when disease exists there; while in the heart, which, according to our author, is far more simple in structure and function, the *organic diseases* "betray themselves by *no symptoms* till they have made such progress that we have no means of arresting them." This is surely one of the most palpable contradictions that can be imagined. The reason no doubt is, that Dr. P. has paid no auscultic attention to the *physical signs* of disordered function or structure of the heart, and consequently knows nothing of them. But by attention to the lungs, he thinks he can tell the early symptoms that are and that are *not* attended with tubercles.

That tubercles are always caused by some local disease of the part where they are found, and never rise from an hereditary taint, we do not believe—and Dr. Philip has not advanced the shadow of a proof to that effect. Much do we doubt, too, the power which we are said to have over the formation of tubercles.

Some vague and rambling observations follow on disease of the lungs produced by drunkenness—and then the old subject, "*DYSPEPTIC PHTHISIS*," from neither of which can we glean any new information. Alluding to the *tabes* of drunkards, Dr. P. remarks:—

"*Pulmonary consumption*, and the disease we have just been considering, are the most common *causes* of organic disease of the lungs; but, as in all other organs, long continued derangement of function, from whatever cause, will sooner or later have this effect." 163.

We would ask Dr. Philip what is "*pulmonary consumption*?" Is it not an organic disease of the lungs? No, says he—it is only one of the most common *causes* of organic disease? Such reasoning was never before heard. A disease is made to be its own cause!

CHAP. VIII. ON ORGANIC DISEASE OF THE STOMACH.

Considering how much Dr. Philip has attributed to an inflammatory process going on in the stomach, as the cause or concomitant of indigestion, and how long he has patronized those active little auxiliaries to physic and surgery—*LEECHES*—we were rather surprized to learn, from our author's farther experience, that the stomach is nearly insusceptible of organic disease.

"Of all the vital organs, the stomach is least prone to organic disease. It seems almost to form an exception to the general law, that long continued derangement of function terminates in disease of structure: for we see people labouring under a certain degree of indigestion for the greater part of life, and even the more severe forms of it, without apparently any tendency to organic disease of this organ; and that even when the irritation of the stomach has been such as, through the intervention of the nervous system, to derange the structure of distant parts; and, on the other hand, when organic diseases of the stomach do take place, it is not particularly in those who have been troubled with symptoms of indigestion." 174.

Never was there devised a more ingenious theory than this. It is absolutely impregnable. The stomach may disorganize the most distant parts of the human frame, but it is proof against alteration of structure itself. The diagnosis therefore never can be corrected by the scalpel—for whether disease be found or not, the Doctor and the doctrine are securely entrenched against all attacks. We do not indeed deny that disordered function of the stomach may derange the functions of the brain and various other parts of the machine; but we have great doubts of the extent of power in disorganizing distant structures, which Dr. P. is inclined to confer on it. The following passage is quite unobjectionable.

"From the extreme sensibility of the stomach, and the various causes of irritation to which it is exposed, there is hardly any part of the body that is not liable to be affected through it; and it gives peculiar power to all its sympathies, that the brain, through the medium of which all sympathetic affections take place, peculiarly sympathises with it. Thus it is, that by indigestion the whole system is kept on the fret, if I may use this expression; and if any part is more liable to disease, of whatever nature, than the rest, it is apt to show itself." 177.

CHAP. IX. ON MORBID AFFECTIONS WHICH PRECEDE CHANGE OF STRUCTURE IN THE LIVER.

The opening sentence of this chapter convinces us, if there were no other proofs in Dr. P.'s work's, that the author is very little acquainted with morbid anatomy. "Of all the vital organs, next to the lungs, it (the liver) is the most frequent subject of organic disease." Now we fearlessly appeal to every practical anatomist, hospital physician, or even to the students at hospitals, whether there ever was uttered a more erroneous sentence than the above. Take, for example, the heart, and we confidently affirm that, for one organic disease of the liver which we meet with in the dead-house of an hospital, we shall find six, if not more, of the central organ of the circulation. One would suppose, indeed, that Dr. Philip drew his conclusions from the inconsiderate and inaccurate phraseology of routine practitioners, or even patients themselves, rather than from the dissecting room. No term is more common in the mouths of *routinists* than "LIVER COMPLAINT"—yet in not one-twentieth of these "liver complaints" is there any disease of the organ at all! That the function of the liver, and the condition of the bile, are very often deranged, we can have no doubt; but those who are candid will admit that we are very imperfectly acquainted with the nature of these functional derangements—and that we often infer their existence upon very doubtful evidence—or rather without any good evidence at all.

That the sympathy between the stomach and liver should be one of the

most common and most powerful, we have every reason to believe—even from their direct association in one mutual process—digestion. Dr. Philip avers, and we think truly, that “derangement of its function (the liver) almost uniformly attends that of the stomach”—but how does the following passage accord with our author’s general doctrine of the stomach’s power to disorganize those viscera with which it is linked in sympathy?

“In this country at least, indigestion, however severe and long-continued, seldom produces disorganization of the liver, except in drunkards and those who have suffered from the effects of sultry climates.” 180.

The following quotation will add another proof that Dr. Philip does not keep pace with modern advances in pathological science.

“It is not at all uncommon for blows on the head to produce inflammation of the liver; an effect they rarely, if ever, produce in any other of the abdominal or thoracic viscera; and, on the other hand, while, in the most severe inflammation of the heart, lungs, stomach, or bowels, the mental functions remain clear to the last, delirium attends that of the liver.” 181.

It has been well ascertained, of late years, that blows on the head, or in any other part of the body, together with fractures and surgical operations, more frequently produce purulent depôts (which must be what Dr. P. means by inflammation) in the lungs than in the liver. Neither can we coincide with our author, that delirium is such a common attendant on acute hepatitis—and so invariably absent in other inflammations. Surely Dr. Philip could not have witnessed many cases of acute carditis, or he would not have made the hardy assertion, that the sensorial functions remain unaffected till the last. It is curious, if this delirium be such a constant attendant on hepatitis, that Dr. Good never once mentions the phenomenon under the head of EMPRESMA HEPATITIS—while he dwells on the delirium which attends certain forms of pleuritis, and which, indeed, gave occasion to the term *paraphrenitis* by the ancients, and even by the moderns. Every practitioner, in fact, knows, that whenever the general febrile action kindled up by a local inflammation, wherever situated, rises to a certain degree of intensity, the sensorial functions are drawn into the circle of disorder;—and it is inconsistent with accurate observation to lay it down as a dogma, that inflammation of the liver has the exclusive privilege of disturbing the functions of the brain in the form of delirium.* How many instances of severe or fatal peritonitis puerperalis has Dr. P. seen unaccompanied by delirium? We would say, indeed, that inflammation of the serous membranes of the abdomen is far more productive of sensorial disturbance than HEPATITIS.

Dr. Philip next rehearses, from his work on Indigestion, his peculiar opinions respecting the *measure* which we are supposed to possess for habitual derangement of the biliary secretion, in “the fulness of the right side of the

* The reader is requested to peruse that section of Mr. Annesley’s great work which treats of acute inflammation of the liver, or our analysis of it, in the 18th No. of this Journal for October, 1828, page 289, *et seq.* Let him there search for this pathognomonic symptom—delirium—and he will search in vain. We suspect that this is one of the many instances where Dr. Philip has mistaken reading or hearsay for those facts and personal observations on which his work is said to be solely based.

body"—“the consequence of a distended state of *that bowel into which the stomach first pours its contents.*” Here is a periphrasis with a vengeance, in order to avoid so learned a term as *duodenum*, which might not be intelligible to those who had made themselves masters of “the laws of the vital functions.” Greatly do we wonder that Dr. Philip’s hand did not tremble and his heart palpitate, when he felt himself thus lowering the language and the science of physic to the comprehension of general readers.

Dr. Philip assumes that this distention of the duodenum, and consequent fullness of the “right side of the body,” is owing to bile less active in its properties than it should be. For our own parts, and we have paid some attention to the subject, we never could discover any other fullness in the right side of the abdomen, than what might be very easily accounted for by the ascending arch of the colon, and that part of the transverse arch which is near or in contact with the liver. These portions of the bowel are often the seats of accumulations—and much more likely to be so, and to produce inequality of the two sides than any accumulation in the duodenum. As for the state of the bile, we have reason to believe that it is as often acrimonious as it is inert—and that much more misery is produced by the draining of such bile into the upper portion of the intestinal tube, than by any imaginary distention of the duodenum, from insipidity of the hepatic secretion.* But the worthy Doctor having once got a theory into his head can never get it out again, notwithstanding all his professions about being solely a man of facts.

“All affections of the liver produce depression of spirits; hence the name melancholy. In its organic affection this symptom is generally more uniform; its secretion is also more uniformly deranged, although, as I have just had occasion to observe, it is not very uncommon to find the colour of the bile natural, even when the liver is both enlarged and indurated;—one among many proofs that, by the colour alone, we judge very imperfectly of the state of this fluid.

From the enlarged and, consequently, heavy liver pressing on other organs, the patient often experiences considerable difficulty in lying on the left side, although this symptom is not so uniform as, from reasoning, we might expect, and is probably influenced by the degree in which its ligaments are relaxed. When he lies on the right side, the enlarged liver resting only on the ribs and muscles, generally gives less uneasiness. As the disease advances he usually finds lying on the back the only easy posture; and in the most advanced cases, the easiest position is on the back, inclining a little to the right side with the shoulders considerably raised.

The symptoms, in the progress of the disease, vary according to the liability to disease in the particular constitution in those organs with which the liver chiefly sympathises, particularly the brain and lungs. In some cases the patient becomes more or less lethargic, the mind at times wandering; and long-continued irritation of the liver occasionally gives rise to some of those states which dispose to the different forms of apoplexy which we have been considering. Either by debilitating the vessels of the brain it gives a tendency to their morbid distension, or by its effect on the brain itself weakens its powers and disposes to their failure from slight causes.

* Torpor of the lower bowels is far from being invariably dependent on torpor of the liver. A very considerable proportion of people, who labour under constipation of the bowels, have a perfectly sound state of the liver, and a healthy secretion of bile.

The headaches of bilious subjects every one has witnessed. They are, for the most part, felt chiefly in the forehead. They are of various descriptions; dull and heavy, or acute and lancinating, and not unfrequently occupy other parts of the head, the crown, the sides, or the back part.

In the same patient they generally return to the same part, and often excite the idea that there must be some fixed disease of the brain in the situation they occupy; but the pain is not constant, and although any uniformity in such symptoms is never favourable, this has very rarely, in my practice, proved to be the case. Some peculiar nervous sympathy, little inclined to produce organic disease, serves in bilious subjects to determine the particular seat of the headache.

One of the most common and fatal effects on the head of disordered liver, is what is called *internal water of the head*, which is apt to appear under thirteen years of age, and is most frequent in infants. In this disease, as in many of the other diseases of children, we see the illustration of a principle which has an extensive influence on the phenomena of disease." 197.

This "internal water of the head" is considered by Dr. Philip as "almost always the effect of disordered liver," and owing, he thinks, to languid inflammation of the brain. The only successful plan of treatment, he avers, must be based on the hepatic origin of the disease.

In the remainder of the volume, occupied with the means of preventing or remedying those states or conditions which precede organic disease, we see little, if any thing, that calls for remark—certainly nothing that we can quote with advantage to our readers. To the general public (if they peruse it at all) the greater part of this volume may appear new; but it is quite evident that the author never meant it for professional perusal. He is too conscientious, indeed, to expect that his brethren, who are not overladen with riches, could afford to purchase his works twice over, even when changed in title. We regret exceedingly that we have been compelled to speak in somewhat disrespectful terms of this publication; but we appeal to every individual who may take the trouble to examine the book, whether or not we have characterized it justly. It is exceedingly unworthy of a pen from which so much valuable matter had previously flowed.

IV.

ON THE CURATIVE EFFECTS OF LOSS OF BLOOD. By Marshall Hall, M.D. &c. &c.

[Second and concluding Article.]

THE talented author of the work before us has so mingled or mystified, we had almost said, original matters with the substance of preceding publications, that it would require much more time than we are able to spare, to separate the new from the old. Let us take the first passage of the introduction to this division of the volume under review, and our readers will probably be quite familiar with the words.

"It is one of the most remarkable facts in physic, that if several patients of similar strength and constitution, but affected by dissimilar diseases, be respectively placed in the erect position and bled to deliquium, they will be found to have lost very various quantities of blood. I have known a patient not apparently very feeble, faint on losing four ounces

of blood; and I have known patients bear to lose fifty, sixty, and even seventy ounces of blood without syncope." 175.

Our readers well remember that the foregoing passage forms part of an *avant-courier*, which Dr. H. sent forth some time ago,* with the view of collecting information on the effects of blood-letting. A long extract from a paper published by Mr. Heming in the *Medical Gazette*, concludes the first section of this chapter.

Dr. Hall then proceeds to particularize certain specific diseases in their relation to loss of blood, beginning very naturally with fever.

I. FEVER.

The different forms and complications of this and of inflammation, are of very frequent occurrence; and, in their intimate nature and relation to blood-letting, "pure fever and pure inflammation are widely different."

"There have been long disputes, indeed, whether fever ever be perfectly pure, that is, independent of inflammation. In a practical point of view, I think it the safest plan to regard fever as occasionally truly idiopathic, but as extremely liable to be conjoined with inflammation.

Whoever is imbued with an accurate knowledge of physiology will, I think, perceive in the phenomena of fever, much that is to be distinctly referred to the state of the nervous system: the alternate chills and heat, the tendency to vertigo, the muscular tremors, the affection of the various secretions, are plainly of this character. With this, the vascular system soon participates. They form a whole which suffers together.

Fever seems to differ from inflammation in being an affection of the whole nervous and vascular systems; in inflammation there is an affection of these systems in one part or organ.

There is another difference between these two diseases: fever appears to consist in an affection of the nervous system and of the heart and larger arteries, the capillary vessels being only affected as an extension of this morbid state. In inflammation there is, according to the experiments of Dr. Wilson Philip, and Dr. Hastings, a primary affection of the capillary vessels, consisting in enlargement of their diameter and a slower movement of more numerous globules of the blood. A consequence which flows from this view of the subject is, that to subdue momentarily the state of fever, we have only to subdue the augmented action of the heart and larger arteries; but as the capillary circulation is less immediately under the influence of the heart, the action of the former may be subdued, whilst a morbid state of the latter may be continued with comparatively little change.

It is upon this principle, I believe, that a fact is to be explained which will be frequently adverted to in this work, that syncope is more readily produced by the abstraction of blood, in pure fever, and in other diseases consisting alike in the state of the heart and larger arteries, than in pure inflammation, consisting in a peculiar condition of the capillary vessels, more permanent and less under the influence of the general circulation.

In the former case, syncope is the simple effect of depriving the heart and arteries of their accustomed stimulus, and this probably under circumstances of augmented susceptibility of the nervous system to impressions of this kind; in the latter, although blood may be taken, and the action of the heart and arteries be thus subdued, yet from a less degree of susceptibility of the nervous system, and from the unsubdued morbid action of the capillaries, acting as it were as a permanent stimulus to the general system, syncope

* See No. XXIII. of this Journal, page 40, et seq.

is not so soon induced by the abstraction of blood. But whatever the explanation of this fact may be, the fact itself is, I think, established upon the sure ground of multiplied experiment." 199.

There are three circumstances, Dr. H. observes, in fever, which should lead to the use of the lancet—excessive reaction of the vascular system—much excitement of the nervous system—local inflammation. On each of these cases our author expends a few remarks. In excessive vascular reaction, he observes, bleeding is of essential service, especially when employed early—the limit, beyond which it would be dangerous to go, being clearly marked out by the degree of susceptibility to the effects of loss of blood, denoted by the tendency to syncope on abstracting blood pretty freely in the erect posture.

"The same observation may be made in regard to great nervous excitement denoted by delirium. To abstract a moderate quantity of blood does great good. But to bleed too freely is dangerously to depress the powers of life. In this case, as in the last, the patient may safely be placed in the erect posture, and bled to incipient syncope, if it be a first bloodletting and early in the disease.

But the most marked difference in regard to the powers of supporting the loss of blood, is superinduced by the addition of a local inflammatory affection to the original disease. The patient immediately becomes less prone to faint on being bled. It will be obvious how important it would be to establish this point accurately by an ample collection of facts; and thus to trace it in its reference to practice. It appears to me, from what I have hitherto ascertained, that there is, in every instance, a strict alliance between the degree of tolerance of loss of blood and the exigencies of the cure." 201.

II. Inflammation. Dr. Hall's remarks on this point are very brief. He would observe that inflammation is not necessarily ushered in by rigor, or attended by heat of skin, except in very severe cases. In the slighter instances he thinks the rigor generally depends upon a superadded cause, existing in the state of the bowels—while the heat depends upon this cause, or upon the use of remedies. He has also observed that the pulse, in pure inflammation, is very little accelerated at first; but is so in the severest cases. In pure inflammation, except of the encephalon itself, the head (he observes) is frequently little affected, there being neither head-ache nor vertigo—though these symptoms eventually come on, together with delirium, "as the result of depletion and exhaustion."

"But the remark of greatest moment which I would make in this place, is, that pure inflammation induces a state of the system which protects it from the influence and effects of loss of blood. A patient under the influence of pure inflammation, will bear to lose a far greater quantity of blood without experiencing syncope, than the same person in health. This fact is of the utmost interest and importance in a practical point of view." 203.

Inflammation he considers as a "sort of concentrated stimulus, exciting and maintaining the powers of the system." We should rather say that it is an *irritation* producing violent and *irregular* action in the system. Thus while the action of the vascular apparatus is excited in inflammation, the functions of various organs, especially the digestive, are almost annulled. We agree with our author, however, that, under the influence of inflammation, blood-letting is well borne. The protective influence of inflam-

mation differs from that of fever. "In the latter, syncope subdues all the actions;—in the former, those peculiar to the inflammation still subsist, being, in a great measure, independent of the action of the heart." This fact, according to our author's experience, obtains in a more marked manner, in inflammation of the encephalon than in that of any other organ of the body. It is also more observable in inflammation of the serous membranes, and parenchymatous structures, than in that of the mucous membranes. The following case is put forth to illustrate, first, the protecting powers of inflammation in regard to the effects of loss of blood—and, in the second place, these very effects, when this peculiar influence is withdrawn.

"Mrs. ———, aged 30, and of moderate strength, had suffered from pain in the right hypochondriac region for a month, when on the evening of the 14th of May, 1828, it became extremely acute.

On the morning of the 15th, it continued very severe, interrupting the respiration, and preventing the patient from assuming the recumbent position; the pulse was 90, full, and hard, the surface hot. She was placed quite erect, and bled to syncope; this took place when thirty-nine ounces of blood had flowed, the pain being relieved but not entirely removed. Calomel and purgative medicines were given. In the evening the pain had increased, the pulse remained as in the morning, the medicines had acted well; Mrs. ——— was again placed in the erect position and bled to syncope, and the same quantity of blood flowed as before; the pain being quite removed. A blister was applied, and the medicine repeated with colchicum.

On the 16th, the pain continued relieved; the countenance was pallid; the pulse less frequent; the skin cooler.

On the 19th, there was no pain of the side, the countenance was pallid, but apt to flush frequently; the pulse was 96, and throbbing; with much throbbing of the head, ringing of the ears, and complaint of weakness.

On the 20th, Mrs. ——— was found subject to flushing, palpitation of the heart, and frightful dreams; the pulse was 90, but without throbbing; the respiration unattended by pain; but there was still some degree of tenderness on pressure in the right hypochondrium." 208.

In another case the most active blood-letting had been employed to subdue peritonitis; but an abscess formed and burst into the bowels. At this moment the most acute symptoms of re-action from loss of blood were set up, and the patient suffered from the most violent throbbing pain of the head, intolerance of sound, palpitation, &c.

"In a third case detailed to me by Dr. Abercrombie, a similar tumor formed on the right side of the pelvis, the inflammation of this tumor greatly subsided by the use of the ordinary remedies; but the patient became affected with delirium. Such cases having been fatal under other treatment, Dr. Abercrombie prescribed a glass of wine to be given every hour. After the fourth glass the patient was found composed. The tumor eventually suppurated externally, and the patient did well." 208.

Dr. Hall does not recommend blood-letting to be carried to actual syncope, "but only to the very first signs of approaching syncope, which is, in fact, to be prevented by immediately laying the patient in the recumbent position." He thinks that, in most of the cases in which much reaction has followed syncope, there has either been no inflammation, or it was subdued completely by the bleeding.

"But there is another remark of the utmost moment, which I must make though cursorily, in this place, as it will require a more particular notice hereafter. It is, that at the very moment the protective influence of inflammation is withdrawn, further bloodletting is in the highest degree dangerous. I have known several instances of the fatal issue of bloodletting when this measure has been instituted as a preventive against the recurrence of symptoms of inflammation which had been subdued by previous bloodlettings.

If I were to venture to state the average quantities of blood which would flow in the different cases and forms of inflammation, I should mention forty ounces for arachnitis, from thirty to thirty-five for pleuritis or pneumonia, and fifteen for bronchitis. This simple statement cannot fail to strike the medical reader. It is impossible to foresee at once all the advantages which must flow in practice, from these important differences in the powers or susceptibilities of the system in regard to bloodletting in these different diseases.

I think it important to mention, in a very especial manner, that in some forms of acute anasarca, there is great tolerance of loss of blood." 210.

III. IRRITATION.

Dr. H. next proceeds to notice this morbid affection, of frequent occurrence, "and with which the profession generally appear to me still to be totally unacquainted." This statement, Dr. H. thinks, will not be deemed too strong, if he is enabled to shew that "there is a series of cases, not generally distinguished from certain inflammation, and yet very different in their nature, and especially in their reference to the effects of loss of blood." Granting the existence of this series of cases to the fullest extent, it would not prove that the profession generally is "totally unacquainted" with the subject of irritation. We are ready to grant, however, that irritation is very frequently mistaken for inflammation by the routine practitioner, and that much mischief is daily done by this mistake. But, in truth, it is not always very easy, even for the most skilful and attentive practitioner to discriminate in these cases, and where the practitioner is in doubt, he naturally concludes that it is safest to err on the safe side, and run the risk of treating irritation for inflammation, rather than the reverse. Yet there is scarcely less mischief done by the one mistake than by the other.

"The cases to which I allude, resemble, in their symptoms, the most acute forms of arachnitis, pleuritis, and peritonitis, but especially arachnitis. Yet instead of possessing the power of resisting the effects of loss of blood belonging to inflammation, there is the utmost degree of susceptibility to those effects. *In the former cases thirty, forty, and even fifty ounces of blood may flow before the slightest deliquium is observed; in the latter there is frequently the most perfect syncope on abstracting nine or ten ounces of blood!*

The irritation of a calculus in the ureter, or in the hepatic duct, is well known to occasion a remarkable sympathetic affection of the stomach. The introduction of a bougie into the urethra sometimes induces rigor and a complete paroxysm of fever. Uterine irritation is not less frequently the cause of extraordinary effects upon the system generally and upon various organs.

But of all the sources of sympathetic morbid affections, irritation in the stomach and bowels appears to be the most common, and certainly not the least important. Indigestible substances taken, and disordered feculent matter retained, are the frequent sources of that combined affection of the head and the stomach, termed sick headache." 212.

If such effects of local irritation upon distant organs be admitted, our author thinks it cannot be considered extraordinary that others less recogni-

zed should exist. The most frequent cause of this affection, says Dr. H. is a disordered state of the colon—the next is, “some indigestible substance taken into the stomach.” These generally require some superadded cause before the morbid affection can be produced. Some shock sustained, or some effort made by the system, is necessary to rouse into activity the cause of irritation otherwise dormant. In the same manner, indigestible substances may frequently be taken, when the health is unimpaired, with impunity; but if the system be under the influence of a shock, or effort, or of nervous or vascular excitement or exhaustion, a cause of disorder which might otherwise lie inert, proves of frightful activity.

“The effects of intestinal or nervous irritation are chilliness, varying from coldness of the extremities to extreme rigor, followed by great heat of the surface, and symptoms resembling those of arachnitis or peritonitis, singly or successively, in their most acute forms, but especially arachnitis; more rarely there is pain resembling that of pleuritis; more rarely still, a peculiar pain passing along one side of the neck to the shoulders; and occasionally, generally after blood letting, there is palpitation of the heart.

It must be regarded as extraordinary that such marked affections have not been discriminated, and traced to their proper source. But I am persuaded that they are, to this day, confounded with inflammation of the organs chiefly affected, to the great injury, and even danger of the patient. It is indeed extraordinary how slow the human mind is to receive new impressions, even of the truth, wedded as it usually is to first opinions.

These observations apply particularly to that form of this affection which resembles arachnitis. There are few who distinguish it from arachnitis itself. I have, however, witnessed some very interesting scenes, and not less interesting convictions of the truth of the views which I have taken of this subject, in cases which have occurred in the persons or in the families of medical gentlemen themselves.” 214.

One of the earliest cases which excited our author's attention to these effects of irritation, was that of a delicate married woman, aged 35, who appeared to be labouring under inflammation of the peritoneum, the symptoms of which were so severe, as apparently to demand the lancet and leeches, by which 30 or 40 ounces of blood were abstracted. The bowels were freely purged—the stools fetid. All the symptoms being removed on the third day, a speedy and secure convalescence was expected; but, on the fourth day, Dr. H. was urgently requested to see the patient.

“She had been seized with severe pain of the head, especially over the eyebrows, attended by beating and throbbing, and by the most urgent intolerance of light, so that the eyes could not be opened for a moment for examination; the pain was increased on attempting to sit up erect; the countenance was palish and sallow; the pulse full and frequent; there was no faintness or sighing.

As this case occurred very early in my investigation of the effects of irritation, I hesitated in determining whether the symptoms were such as I had already witnessed in one or two cases as arising from that cause, or were indicative of inflammation within the head. I prescribed a draught with thirty drops of the tinctura opii and of the spiritus ammoniæ aromaticus, and called again in an hour and a half, not without anxiety. I was greatly relieved to find my patient better in every respect, able to bear the light, suffering much less pain, and having enjoyed a comfortable sleep after a night of wakefulness and distress. Aperient medicine was administered, and, after the full evacuation of the bowels, light nourishment, and a repetition of the draught with tinctura opii and spiritus ammoniæ aromaticus, whilst a cold lotion was applied to the head.

On the succeeding day, Mrs. — was better in every respect, but complained of any noise. On the next day she was comparatively well, only suffering from vertigo on raising the head.

From this time the recovery was progressive and uninterrupted, the utmost care being taken to regulate the bowels and the diet." 217.

The next case related is that of a young man, aged 19, who complained, on the 29th September, of shooting pain through the region of the stomach to the back, recurring at intervals. These symptoms went off till nearly the same hour next day, when he became affected with coldness of the hands and feet, flushing of the face, violent and constant pain of the head, numbness of the right hand, and contraction of the right side of the lip—slight incoherence—intolerance of light and sound. About two hours after this attack, sickness came on—a great load of matters was vomited—and he became more collected, though still complaining of his head. Some aperient medicine was given, and he recovered in a day or two, without any depletion.

"The next patient, an intelligent surgeon, tall and robust, had undergone a painful operation on the anus, and had suffered much for six days on passing the fæces and on dressing the wound; he had kept himself low, and had passed restless nights as well as painful days. On the morning of the sixth day, after some exertion, the feet and legs became extremely cold; the surface afterwards became generally heated and the mouth clammy; the face was flushed, the skin sore, and the eye-balls particularly tender; the pulse rose to 96. In the afternoon the chilliness returned, and was followed by heat, throbbing in the temples, and pain in the head, with flying stitches in the side; the pulse was 112. Sixteen ounces of blood were taken from the arm; faintness and perspiration were induced, the throbbing ceased, but the pain continued, and the pulse was 116; the patient felt overcome, became restless, and affected with vertigo on moving, and frequent sighing.

At night the head became distractingly painful; the faintness exceedingly distressing; I found my patient with wet cloths applied over the forehead and eyes. The question of further bloodletting or of the application of leeches was proposed to me. I was persuaded, however, that the affection of the head depended upon intestinal and nervous irritation. I therefore prescribed a large enema of gruel and oil; with sal volatile, and nourishment.

The enema induced vomiting, and a copious alvine evacuation. On the following day all symptoms of affection of the head had subsided.

In this case the natural strength of the patient, the violence, and even urgency, of the symptoms, the recovery without further bloodletting, and the extreme susceptibility to the effects of loss of blood, are all remarkably displayed, and form a striking contrast with the characters of true arachnitis." 220.

The following case which we shall abridge, is offered as a not less interesting illustration of this morbid affection.

Mrs. —, aged 24 years, had suffered from an attack similar to the present, some months previously. She was excited by company, and then began to complain of head-ache, sense of fatigue, and unrefreshing slumbers. Two days afterwards, she had alternate chilliness and flushings, the head-ache augmenting. These symptoms became exasperated during the next two days, the coldness of the extremities being accompanied by great pain, succeeded by extreme dryness and intense heat. The tongue was loaded—the stomach sick—the bowels disordered. During the next two days, these symptoms went on increasing—the head-ache being accompanied by intolerance of light and throbbing, unabated by aperient medicine and rest. It

was deemed proper to draw blood; and the patient being placed in the perpendicular posture, the stream was allowed to flow till faintness took place. Syncope was produced by the abstraction of 12 ounces of blood. The distressing symptoms continued till next day, when a discharge of scybalous and unhealthy fæces gave permanent relief.

"In both these cases the symptoms of affection of the head persisted after the blood-letting, and were relieved by sickness and a free evacuation of the bowels. In both, the prostration from the bloodletting was extraordinary." 222.

The following case we shall give in our author's own words.

"Mrs. —, a young married lady, in the fourth month of pregnancy, habitually costive. The present attack came on after much fatigue in travelling; and she is stated to have experienced a similar one formerly.

On the 7th of October, she complained of pain of the head, and leeches were applied to the temples. On the 8th the pain of the head was more violent and attended with much throbbing of the temples; and to these symptoms pain of the right side under the breast, a sense of tightness across the chest, and hurry in breathing, were superadded. Twelve ounces of blood were drawn, and an efficient aperient medicine was given, and on the 9th and 10th she was much better; and a saline medicine was prescribed.

On the 11th she was again taken worse, after imprudently sitting up; the beating of the temples, tightness across the chest, and difficulty in breathing returned, unattended by cough. Sixteen ounces of blood were taken from the arm, with great relief, and the aperient medicine was repeated.

The patient was relieved, and continued better on the 12th. In the night of the 13th the medical attendant received an urgent message to visit his patient, and found her affected with severe pain and beating of the head, great tightness and pain across the chest, and with violent palpitation of the heart. Twelve ounces of blood were taken, and calomel and other aperient medicines given, with considerable relief.

On the 14th a physician was consulted, who prescribed the pil. hydrarg. with an aperient draught. In the night the apothecary was again sent for, all the symptoms having returned, and now, for the first time, with the addition of a slight cough. Eight ounces of blood being drawn, great relief was obtained.

In the night of the 16th the medical attendant was again sent for; all the symptoms had returned in a still more aggravated form, the pain of the head, tightness across the chest, palpitation, and cough being extremely severe. Eight ounces of blood were drawn without relief; the head was shaved, a cold lotion applied, and a blister ordered for the back of the neck.

On the 17th I saw the patient for the first time: there were much pain and throbbing of the head, which felt benumbed and heavy as if she could not raise it from the pillow; there had been no sleep; the pupils were extremely small, with intolerance of noise and disturbance of any kind; there were palpitation of the heart and sometimes faintness and a feeling of sinking or dying; there were a sense of tightness across the chest, oppression in the breathing, and a peculiar tracheal or laryngeal cough; some pain in the region of the uterus increased by pressure, but no vaginal discharge;—the countenance was usually pale, but sometimes flushed, the tongue extremely loaded, and even black at the back part; the alvine evacuations, on giving purgative medicine, were still, at first, dark-coloured offensive, and scybalous, and afterwards, offensive and like yeast; the pulse was 120.

I was forcibly struck by a general but marked resemblance of this case, to those already given, and to others of the same nature which I had witnessed; the depleting plan already fully adopted and repeated had proved ineffectual in affording lasting relief; the purgatives hitherto given, were, I believed, inefficient. The plan I proposed was, to give efficient purgatives, to restrain their operation by draughts with tinctura opii and spiritus ammoniac.

aromaticus, to support the strength by means of nourishment given every hour or oftener, to procure sleep by anodyne enemata, to guard against exertion or fatigue, noise or disturbance. The recovery was uniformly progressive; there was not even one recurrence of the painful attacks; the symptoms gradually disappeared, the pulse becoming natural, the pupils of the natural size, the head and chest relieved, and the bowels daily but fully moved; quiet sleep, and a good appetite returned.

In six days the patient was convalescent; shortly afterwards she bore a long journey home without any ill consequence, and at the proper time, had a safe delivery." 225.

Those forms of this morbid affection, says our author, which resemble peritonitis and pleuritis, are equally characterized by alternate chill or rigor and heat—frequency of pulse—and susceptibility to the effects of loss of blood. They do not occur so frequently or distinctly as the affection of the head. The following is a graphic description of this affection in general terms.

"It generally begins in the manner of a sudden attack. This attack is usually ushered in by rigor, indeed by a more distinct and decided rigor than is observed in many cases of inflammation; the rigor is usually soon followed by much heat of surface; with the heat the patient experiences some affection of the head, chest, or abdomen, and, indeed, frequently of all; there are vertigo on raising the head, pain, and some morbid impression on the mind, panting in the breathing, fluttering about the heart, with general hurry, irritability, and restlessness; the tongue is white and loaded; the alvine evacuations are morbid,—dark-coloured, fetid, and scybalous,—or yellow like the yolk of egg,—or of the appearance of yeast; the urine is turbid and frequently deposits a copious sediment.

The affection of the head consists of the most acute pain, the greatest intolerance of light and sound, and the severest form of vertigo, wakefulness, and distress, and sometimes even delirium, and the pupils of the eyes are often extremely contracted.

The affection of the chest is denoted by severe and acute local pain, which is apt to vary its situation, passing from one side to the other, or to the back, or occupying a situation higher up or lower down: this pain checks a deep inspiration, and even the ordinary breathing, to which it imparts a character of difficulty and anxiety.

When the abdomen is affected, there are acute pain, and great tenderness under pressure, in some part, or more or less generally diffused. The attack and situation of the pain is such, in some instances, that the case is with difficulty distinguished from gall stones, though it more generally resembles peritonitis.

When the heart is the seat of this affection, there are violent and terrific attacks of palpitation, and the course of the carotids, and even of the abdominal aorta, is sometimes the seat of violent pulsation or throbbing.

All these affections are apt to occur in sudden attacks, and to recur in paroxysms,—perhaps varying their form,—and exciting great alarm in the patient and his friends, who usually dispatch a hurrying message to the medical attendants." 232.

The cases and observation which have been laid down establish the fact, that there are attacks which resemble inflammation of the head, chest, or abdomen, and yet are totally different in their nature—a fact that is highly important, in regard to diagnosis, on which the well-being of the case depends. The following diagnostic marks cannot be abridged without detriment.

"I would first observe that the attack of irritation, is, in general, more sudden than that of inflammation, which is usually formed somewhat more gradually. This circumstance must therefore be cautiously inquired into, and may assist the diagnosis.

I believe too, that the seizure in the former case is attended by more distinct rigor, and afterwards by greater heat, than in the latter.

The case of irritation affects, in a marked degree, more organs at once, than that of inflammation, which is usually confined, at first at least, to one.

The state of the tongue and the condition of the alvine evacuations are far more marked by disorder, and the latter are far more offensive, in attacks from irritation than in cases of inflammation.

The affection of the head from irritation comes on suddenly, is formed all at once, and is frequently attended by great restlessness, suffering, and distress, and there is early syncope on taking blood. In arachnitis, the disease is usually formed somewhat more gradually; the patient has been subject to pain of the head perhaps for some days or even longer; he complains less; or at least there is less urgent distress,—less distress of a general kind; the pain may be very severe, although it is more frequently rather obscure; the intolerance of light and sound is less urgent; the rigor, and subsequent heat, and the attack in general are less marked; the patient is not so soon relieved by remedies, and the tongue and alvine evacuations are less morbid, and there is, especially, great tolerance of loss of blood. In the attack of affection of the head from irritation, the patient is relieved perhaps completely if the lancet be employed, but the attack soon recurs with equal or greater violence; in arachnitis, the relief is seldom so complete, the interval of ease so long, or the return so marked; the pain is diminished, perhaps, but gradually resumes its former violence, unless active measures be interposed.

When the chest is affected from irritation, the pain is severe and acute, and perhaps increased by a full inspiration; if the inspiration be repeated, however, a second and a third time, the increase of the pain is less and less; the situation of the pain varies; there is no cough, no crepitus on making a full expiration. In all these respects the case differs from inflammation. The remarks already made respecting the relief from remedies, the effect of bloodletting, the tendency to a sudden recurrence of the pain, &c. in cases of affection of the head, apply equally here.

I had long remarked that there might be both acute pain and tenderness under pressure, of the abdomen, without inflammation; this state of things is frequently the result of intestinal irritation. It is distinguished from inflammation by the general symptoms of this affection, the mode of attack, the effects of remedies. In inflammation, the surface is usually cool, the head unaffected, the patient remarkably quiet; in the case of irritation, on the contrary, there is generally much heat after rigor, the head is much affected, and the patient is restless and generally distressed, the tongue loaded and perhaps swollen, the alvine evacuations extremely morbid, and great relief is obtained by the free operation of medicine." 236.

Besides the circumstances already pointed out, Dr. H. draws the attention of the profession to some other points, which he considers as very interesting in their nature and worthy of serious consideration. The *first* is, the occurrence of severe affection immediately consequent upon causes apparently inadequate to the production of such effects. Thus a slight blow, or a trifling fall, has appeared to produce an alarming indisposition.

"The truth is that there was already a disordered and loaded state of the bowels,—dormant until roused into effect by the accident. A lady about 50 years of age, fell a few steps down stairs; she got up however and walked to the sofa; in a short time she was taken with chilliness, succeeded by heat of skin and the most intolerable pain of the head and

sensibility to light, noise, &c. She soon recovered on taking active purges alternated with the ammoniacal anodyne draught." 237.

2ndly. Observant practitioners must have often remarked cases of apparent inflammation, probably yielding sooner than usual, or receding altogether, and recurring periodically. 3rdly. Such cases are sometimes relieved, but often refuse to yield to the lancet, recurring with great violence, when quite unexpected. 4thly. There is metastasis apparently of the local inflammation, whilst, in fact, the cause of the whole remained unremoved. 5thly. On dissection of apparent inflammations of internal organs no trace of the disease can be discovered. "The view which has been given of the effects of intestinal irritation may assist us in explaining an event which must have been witnessed by all who have, in any degree, pursued the study of morbid anatomy."

The mode of treatment consists in the free evacuation of the stomach and bowels—anodynes—light nourishment—and some local remedies. On each of these measures our author makes some judicious remarks; but these need not detain us longer, as their application is sufficiently obvious. He justly observes that, if our diagnosis could always be depended upon, there would probably be no occasion ever to use the lancet in such cases. But as, "judicium difficile," it is best, perhaps, to have cautious recourse to blood-letting even in intestinal irritation—since irritation may lead to inflammation.

The last two Chapters we must pass over, partly for want of space, but principally because their contents have been a good deal anticipated in former publications by the same author, and in previous numbers of this Journal. We have adduced sufficient proofs that Dr. Hall does not slacken in his pace of indefatigable observation, and unquenchable zeal, though we certainly regret that he does not give his works a more concentrated and systematic form; since they are now becoming so blended and reiterated that it requires a good memory to distinguish the old from the new—a keen taste to distinguish the meat fresh off the spit from that which has been hashed, even a second or third time. One thing, however, may be safely asserted, viz. that whatever kind of viands Dr. Hall spreads upon the table of his guests, is wholesome and good—a recommendation of no mean value in the present day, when it cannot be said, with truth, that, "what does not poison will fatten."

V.

HOSPITAL FACTS AND OBSERVATIONS, ILLUSTRATIVE OF THE EFFICACY OF THE NEW REMEDIES, STRYCHNIA, &c. &c. &c. By *Jas. Lomax Bardsley*, M. D. &c. 8vo. pp. 223. London, 1830.

We have already noticed Dr. Bardsley's observations on strychnia and iodine, and we shall now devote a short article to the properties of the acetate of morphia, veratria, and colchicum. Our author has found the morphia beneficial in some cases of pain at the pit of the stomach.

Case 1. A young woman, had laboured, for several months, under severe pain at the epigastrium, for which she had used leeches, blisters, and opium without success. The latter remedy afforded temporary relief, but pro-

duced excessive costiveness. A fourth of a grain of the acetate of morphia was given every two hours, and this not producing much effect, the quantity was ultimately increased to a grain every third hour, the bowels being kept open by mild aperients. She recovered perfectly in the course of a few weeks.

Case 2. Ellen Broton, fustian cutter, æt. 41, had laboured under severe pain at the scrobiculus cordis for more than six months; her appetite was nearly gone, and her bowels alternately loose and costive. Castor oil and a quarter of a grain of the acetate every two hours were prescribed, and followed by almost immediate relief. The dose was diminished, and the patient, in four or five weeks, dismissed cured.

Case 3. Michael Sharples, æt. 29, an industrious man, with a numerous family, had experienced much pain at the stomach occasionally for several months, and so severe had it been for the last three weeks, that he could not follow his usual employment. His spirits were low, appetite gone, and bowels costive. Leeches and a blister had been tried. The bowels being opened by purging medicine, a quarter of a grain of the acetate was given three times daily, with excellent effect. In five weeks he was discharged cured, but he subsequently applied with a relapse, which was combated successfully by the same plan of treatment.

Case 4. A young man had suffered, for some months, from such a gnawing pain at the stomach, that he could not continue his occupation, was reduced to poverty, and at last attempted to poison himself by laudanum. After a short course of aperients, Dr. Bardsley gave half a grain of the acetate twice daily; so much relief ensued that the dose was diminished; and, after the expiration of several weeks, he perfectly recovered both his mental and bodily strength.

We need not multiply these cases, but we ought to mention that our author has tried the salt for that troublesome symptom of dyspepsia, pyrosis. He only details one case.

Case 5. Mary Ford, a weaver, æt. 26, had always been delicate, but suffered severely, for the last two months, from gnawing pain at the pit of the stomach, copious discharge of an acid fluid from the mouth, flatulence, and capricious appetite. After castor oil, the acetate was prescribed, a fourth of a grain thrice daily, and in six weeks the patient was discharged cured.

Dr. Bardsley alludes to two or three cases of dyspepsia, in which the morphia was productive of little or no relief, and then passes on to some cases of uterine disease, in which he tested its palliative and remedial powers.

CASE 1.—Scirrhus Uteri. A woman, æt. 46, had suffered for some months from severe lancinating pains in the hypogastrium, accompanied with a copious, sanious, and very offensive discharge from the vagina. Her sufferings were heart-rending, her strength had much declined, and the inguinal glands were indurated and enlarged. Opium to some extent had been tried, but although it afforded relief, it produced constipation, and then became a source of aggravation to her sufferings. An eighth of a grain of acetate of morphia was given every second hour, and shortly increased to half a grain every hour. Her sufferings were mitigated, her bowels no longer confined, and the path to the grave was smoothed. On dissection, the uterus was in a completely scirrhus state.

CASE 2. Induration of the Uterus. A woman, ætatis 36, was the subject of frequent shooting pains in the hypogastrium, costive bowels, and

debility. On introducing the finger into the vagina, the uterus was felt to be harder than natural, somewhat enlarged, and very tender to the touch. Calomel which brought away indurated faeces, then gentle laxatives, and the acetate of morphia were prescribed, and although the bowels continued to be confined, her appetite and strength improved, the uneasiness subsided, and our author discontinued his attendance.

CASE 3. Painful Menstruation. A female servant, ætatis 30, was subject to the most excruciating agony at each return of the menstrual discharge, indeed so great was the suffering that she generally remained insensible for some hours. Her general health appeared to be good, and her bowels were regular; she had tried various remedies without relief. She was ordered to take a quarter of a grain of the acetate of morphia on the first accession of pain, and to continue this proportion every half hour whilst it was violent. The second dose afforded her very great relief, without in the least suppressing the discharge, and she now takes the morphia at every monthly period, with the same advantage.

We are next presented with some cases of neuralgia in which the morphia was used with advantage or success.

Case 1. Ann Jones, ætatis 45, unmarried, was seized in April, 1826, with acute pain, shooting from the fore-part of the left cheek to the ala of the nose and angle of the mouth. After that she regularly experienced a recurrence of the pain, at first once in each week, afterwards several times daily, with the effect of impairing her general health. Every means almost imaginable had been tried, but ether in large doses mostly procured a temporary mitigation of her agony. The acetate of morphia was given, and on the third day its beneficial effects were apparent. At the expiration of three weeks the disease had completely yielded, and the patient has remained well ever since.

Case 2. Mary Williamson, ætatis 52, was first attacked in March, 1825, with severe lancinating pain in the site of the right mental foramen, which afterwards appeared at various times, and was the cause of two teeth being extracted without relief. In June she came under our author's care, and then the least degree of motion or attempt at mastication produced a renewal of pain. The acetate of morphia, with attention to the bowels, was employed, and in July the patient was discharged cured.

Case 3. John Hall, æt. 36, had laboured under inferior dental neuralgia for more than two years when he came under Dr. Bardsley's care. The nerve had been divided with temporary benefit, and opium taken largely with relief, although it constipated greatly. Morphia was exhibited, and in five weeks the patient was dismissed cured. In the course of a few months he reapplied with a relapse, and again the morphia answered for a while. The disease has returned, and he is now taking the extract of belladonna with advantage.

Case 4. Ralph Lomas, a weaver, had been subject for sixteen months to agonizing pain in the left cheek and outside of the nose. Latterly the paroxysm appeared several times in the day, and his sufferings were most distressing. The stomach and bowels were much disordered, and his constitution was impaired. Having paid attention to the chylopoietic viscera, Dr. B. tried the acetate, and the patient soon derived benefit from its use. In three months he was discharged cured.

"The above examples seem sufficient to establish the remedial efficacy of the acetate of morphia in several affections. In proof of its successful administration, it would not be difficult to adduce more instances; but it is my wish to avoid any further detail of cases than may be considered requisite to prove the value of the remedy in question. It must be allowed, that morphia has not always answered the intentions with which it has been employed, but the proportion of the favourable cases has been considerable, compared to those in which it has failed. I have never witnessed any *pernicious consequences* from a prudent use of the morphia. I am led to recommend the acetate of morphia in preference to opium, from a conviction that its efficacy may be equally relied upon, whilst its administration will be unattended by the *distressing head-ache, excessive constipation, and other unpleasant symptoms*, which that drug in large doses mostly induces. It appears to be the *chief advantage* of morphia, that it may be employed in those cases in which it is desirable to obtain a narcotic effect, and at the same time of the first importance to avoid constipation. It is proper to unload the bowels before commencing with the acetate, so as to give the remedy a fair chance. It is prudent to commence with not more than a quarter of a grain, which may be gradually increased to half a grain, a grain, or two grains, according to the urgency of the symptoms and the effect produced. These doses are applicable to adults. I have mostly prescribed it in the form of pill, which seems to answer very well.

It is desirable that the profession should put the virtues of the acetate of morphia to the test of experience, in order that its claims to notice may be better and more fully determined. It is only by the united observations of many practitioners that the value of any remedy can be satisfactorily established." 108.

So much for the acetate of morphia, and it only remains for us to advert to the properties of veratria and colchicum, as tested by Dr. Bardsley. The former substance is obtained from the veratrum *sabadilla*, and a few grains of the acetate have been found to destroy animals when introduced into the stomach and intestinal canal. Feeling anxious to ascertain its effects upon the human body, Dr. Bardsley exhibited it in several dropsical cases. The following may be a specimen of all.

Case. Hugh Cairns, æt. 39, had been ill three months with ascites, and anasarca of the lower extremities, scanty urine, feeble pulse, and somewhat difficult respiration. He commenced with a quarter of a grain of veratria every four hours, which not acting on the bowels with energy, was augmented to half a grain at the same intervals. It produced several watery notions daily, the swellings diminished, the dose was again augmented to a grain twice daily, and the patient was in the course of a month discharged cured.

We see no great prospect of veratria being likely to supersede our other hydropic medicines. Our author has made experiments on the colchicum autumnale in gout and rheumatism, and furnishes a table of twenty-four cases of that obstinate disease which were treated by veratria, and the same number put under the influence of colchicum. There does not appear to be much discrepancy in the results, but we need not pursue this inquiry farther. Every practitioner in these isles must have satisfied himself fully of the powers of colchicum, and the too frequently intractable nature of chronic rheumatism under any plan of treatment.

We have given the preceding cases and remarks without comment of our own, because they do not seem to require any. We fully agree with Dr. Bardsley that the properties of a drug are only ascertained by the united experience of many and various practitioners, and if our notice of these cases shall attract the attention of our brethren to the acetate of morphia we shall feel amply satisfied.

VI.

REVIEW OF THE FACTS AND ARGUMENTS BROUGHT FORWARD BY DR. BARRY, AT THE ROYAL COLLEGE OF PHYSICIANS, RELATIVE TO THE LATE EPIDEMIC FEVER IN THE FORTRESS OF GIBRALTAR. By *Hugh Fraser*, Esq. Surgeon of the Civil Hospital, and late Assistant Surgeon, 12th Regiment.

THE dreadful ravages which the celebrated Fortress of Gibraltar has sustained, during the present century, from the invisible hand of pestilence, have called forth the sympathies of the British nation—and excited the attention of the medical profession. Deeply do we lament that, in investigations bearing on the health and lives of our fellow creatures, the medical spectators should exhibit such a melancholy diversity, not only of opinions, but of facts—and still more that they should have either cause or inclination to question, nay, directly to impugn, the veracity of each other! No investigation has ever given rise to such acrimony in discussion as that of "*contagion and non-contagion*!" We should be sorry to see the tremendous conflicts of BANCROFT and CHISHOLM renewed, in the persons of Barry and Fraser. We certainly think that several of the expressions in Mr. Fraser's paper are too acrimonious; and that his facts and arguments would have suffered nothing, but rather gained in strength, by milder language. Nevertheless, we have not refused to give publicity to this document, because private feelings must give way to the public good. The question of importation or domestic origin, as respects the Gibraltar fever, is one of immense interest, and deserves a philosophical investigation. This inquiry has been opened in France—and now in England. Our own impression was stated while giving an *exposé* of Dr. Barry's paper read before the College of Physicians—and all that we have since learnt on the subject has only tended to strengthen our conviction, that the Gibraltar fever was just as much imported from the Havana with a cargo of cigars, as from old England, in the snuff-boxes of Drs. Pym and Barry.

The summary which we gave of Dr. Barry's paper excited the attention of Mr. Fraser, and, apparently, gave rise to the present series of strictures. We shall, according to our custom, condense and quote, as we deem advantageous to the author and the public.—The following declaration is absolutely necessary.

"If, in the course of my remarks, language or expressions drop from me which may appear strong or uncourteous, I shall be sorry; as I disavow all personal animosity or hostile feeling towards Dr. Barry. But, as he has so mis-stated facts, and so darkened many of the most important truths relative to the history of the epidemic in question, that I fear it will be impossible to enter into an analysis of his paper without the appearance of personality, I shall only observe, once for all, that my object is TRUTH; and if *this* is not to be found (as some have stated) in the arguments either for or against contagion, to whom are we indebted for so grave a charge? Certainly not to the non-contagionist. Before the arrival of Dr. Pym in the garrison, towards the termination of the malady, the word contagion had nearly become obsolete:—So clear and satisfactory were the proofs of the endemic origin of the disease, to those who had witnessed its rise and progress, that no one doubted the accuracy of this doctrine; and Dr. Barry, himself, soon after his

arrival, drew up a paper setting forth a variety of arguments corroborative of the same—but more of this hereafter.” 2.

Mr. Fraser then proceeds to examine, seriatim, the postulates of Dr. Barry, as given in our 24th Number, p. 539 *et. seq.*

“POSTULATE 1.—The late Gibraltar epidemic (says Dr. Barry) was a fever of one paroxysm—cold—hot—sweating. If slight, nothing more—if severe, yellowness about the third day, black vomit, hiccup, total suppression of urine, copious hæmorrhage of black blood from the nose, gums, anus, vagina, and death from 4th to 6th or 7th day, always without fever.”—*Med. Chir. Rev. No. XXIV. p. 539.*

“If this expression of ‘PAROXYSM’ be not meant to convey a ‘sophism,’ it is, to say the least, obscure. If the term be here intended to convey a notion, that during the febrile act there were no remissions or exacerbations, the definition is most improper. Having been present during the whole of the epidemic, my opportunities of examining the disease have been more extensive than those of Dr. Barry, who only arrived at its decline, and the opinions I have formed are, therefore, necessarily grounded on a larger experience; for I must, at least, have seen and treated twenty cases of the disease for every one that Dr. Barry saw or treated; and I assert that remissions, more particularly in the milder cases, were observed, and sufficiently marked to warrant me to pronounce the definition given to be based in ignorance or in error.

“To give a definition of the fever that might answer the purposes of nosology would be extremely difficult; because it presented itself in as many variegated forms as the shades of the rainbow:—and had Dr. Barry wished to have given a more correct view of it than he has done, he would have been nearer the truth, had he said that it was a fever of a ‘continued form,’ attended with remarkable ‘lulls’ and ‘exacerbations,’ without the latter being preceded by any very regular or well-marked rigor—still, however, in a vast number of the cases, with a sensation of chill sufficiently apparent to mark the commencement of a primary or temporary morbid association. Is it likely that a fever which, in a great proportion of the cases, lasted for ten or twelve days, and which occasionally ran on to the 15th or 20th day, could consist of one paroxysm? No; but such a definition answers the views of the Doctor, in his endeavour to prove this a fever ‘sui generis,’ and different from our sporadic, or the marsh remittents of the adjacent coasts.

“Whether our epidemic radically belongs to this latter form of disease, is not necessary for me to discuss;—all I wish to insist upon is, that most decided ‘remissions’ and ‘exacerbations’ took place, unless, perhaps, in fatal cases, where the impetuosity of the onset was often such as to extinguish life before re-action could be induced; and, even when induced, would rush rapidly on to black vomit and dissolution, without giving the physician a chance, as Dr. Cullen would have said, of ‘obviating the tendency to death.’ In such cases, renewed paroxysms were not to be expected; but, in the cases of recovery, most perfect remissions took place, as may be proved from every medical register kept in the garrison.

“Dr. Arniel, who has witnessed four epidemics here, and whose accuracy of observation is so well known, gives the following answer to query 14th from the Army Medical Board.

“I believe the epidemic differs only in degrees of intensity from the Autumnal bilious remittent fever of this climate; and I am the more strongly induced to adopt this opinion, as I have occasionally witnessed, in times when the bilious remittents were frequent, cases attended with the violent attack, the high malignity, and the rapid dissolution, which more generally mark the character of the epidemic;—and, during the epidemic season, instances have been frequent in which the disease has retained the mild form and the distinct character of the bilious remittent.* This was particularly remarked in 1810, and during the epidemic of 1814; and has also been remarked at the breaking out of every epidemic,

* Dr. Arjula, in his ‘SUCCINCTA DESCRIPTIO FEBRIS EPIDEMICÆ,’ says, ‘that in 1803 the febrile actions frequently assumed a remittent type by cold, hot, and sweating stages, being evincibly distinct, and the disease was frequently protracted to the 11th, and sometimes to the 14th day.’

probably from the circumstance of the morbid causes not having yet acquired their concentrated energy and virulence.'

'The disease has no pathognomonic symptoms. Yellowness was not present in about one-third of the patients, and was often wanting when death took place. The black vomit was entirely confined to the mortal cases. Suppression of urine was mortal—retention, not so. Hæmorrhages were not mortal;—on the contrary, they appeared to me, in very many instances, as preludes to a healthy movement. What Dr. Barry wishes to convey, by saying that 'death took place always without fever,' unless in the last stage of the paroxysm, I do not understand;—but it is not necessary here to enter farther into the subject; and, passing over the 'anatomical characters' given in the 2d postulate, which I mean to advert to by and bye, I shall proceed to the consideration of the others.'

'POSTULATES 3d, 4th, and 5th.—Gibraltar is certainly one of the cleanest towns in Europe, not even excepting Bath—well supplied with the best fresh provisions, vegetables, &c. no poor; not a single beggar.'

'4th. The population 21,000 at the commencement of the epidemic, spread over a surface three miles long by more than one quarter broad; besides the bay, the Neutral Ground, and Catalan Village.'

'5th. No town nor territory in Europe has been more improved within the last ten years.'

'I believe that every one who knows any thing of Gibraltar, will acknowledge the improvements made in the Garrison, under the paternal government of Sir George Don, during the last ten years, to have been very extensive; but, as to its being one of the 'cleanest towns in Europe,' 'not excepting Bath,' this is an assertion not borne out by the facts, and could only be made by a person unacquainted with the habits of the people of Gibraltar. But why argue the subject? Let any one attentively peruse the following letters of the late lamented Dr. Hennen, and then deny that Gibraltar abounds in fever-exciting causes, and I will yield to the Doctor's dogmas.

'Inspector's Office, Gibraltar, 29th Aug. 1828.

Sir,

I have the honour to state, for Your Excellency's information, that, within the present week, I have personally visited, or received reports of, five cases of the '*bilious autumnal remittent fever*,' which has made its appearance in a neighbourhood at the back of Hargrave's Parade. One of the cases which I saw had assumed all the appearance of yellow fever, and proved fatal yesterday, and two of the cases reported to me are stated to be of a similar nature, and will probably lead to a similar event.

Independent of these cases, which occurred among the poorer classes of inhabitants, three or four of the family of Mr. Martin, chief clerk in the Civil Secretary's Office, have been attended in a similar disease by Mr. Hugh Fraser, Surgeon of the Civil Hospital; and it is not a little remarkable, that the fatal case seen by me, occurred in a woman who was a servant of Mr. Martin's.

The whole of these cases, as I am informed by Mr. Wilson of the Civil Hospital, are in the line of a '*drain*' which comes down by Mr. Martin's house;—and, within a few yards of the door of the tenements where the individuals have been taken ill, there is a large open grating, from which very offensive vapours are said to arise, and Mr. Wilson states to me that it is hardly possible to be otherwise, as no fewer than '*four privies*' empty their contents into the drain, in addition to the usual feculencies which it is destined to carry off.

I shall lose no time in making a most minute personal examination of the whole of this neighbourhood, the result of which I shall duly report to Your Excellency. In the mean time, I have taken upon myself to order Mr. Beatty, the Director of the Scavenging Department, to take instant measures for cleansing the drain, by throwing a sufficient quantity of water down the grating above alluded to, and then covering it, so as to prevent the emanation of all foul vapours. I have further directed him to survey the drain throughout the whole course, to detect, if possible, any obstruction that may have occurred.

I shall order the medical officer in charge of the district to be most vigilant in the performance of his duty; and I beg to request that Your Excellency will urge the inspectors of districts to a frequent and accurate performance of the duties allotted to them. I would also beg Your Excellency to issue orders to the police serjeants to make the most minute and rigorous inspection of every part of their districts, as I have every reason to believe, that one of the cases alluded to in the first paragraph of this letter was ill from Saturday to Thursday, before the circumstance was reported. It is, however, but proper to say, that the patient had shut herself up, and that the house in which she was had every appearance of being untenanted.

In concluding, it is proper for me to acknowledge to Your Excellency the cordial co-operation which I have experienced from Messrs. Fraser and Wilson, of the Civil Hospital, and from Messrs. Mathias, Dias, Ming, and Lopez, civil practitioners, who lost no time in directing my attention to every particular that might affect the public health, that came within their observation.

I have the honour to be, &c.

(Signed)

J. HENNEN, M.D.

Inspector of Hospitals.

To His Excellency the Governor,

&c. &c. &c.

'Inspector's Office, Gibraltar,
29th August—9 o'clock, p. m.

Sir,

In reference to my letter of this day's date, I have now the honour to inform Your Excellency that I have minutely inspected District No. 24, in company with Mr. Wilson, of the Civil Hospital, Mr. Woods, the medical officer attached to that district, and other staff officers, *'and it is with much regret I have to state to Your Excellency, that in almost every step I took in that district I had reason for surprise, not that the fever had broken out there, but that it had not extended further.'*

It would lead me into matters not immediately connected with professional points, were I to enlarge upon all that I have seen and heard during my inspection of that district; but the conclusions to which I am *'irresistibly led'* are as follows;—and I beg to claim Your Excellency's special attention to them, as the only means of preventing a repetition of those horrors which occurred in this garrison, at the period of Your Excellency's happy arrival in 1814.

1st. From whatever causes it may have proceeded, the *'pauper population'* is dense to a degree, *'incredible except by those who have seen it.* In sheds, *'without ventilation, without drainage,'* and generally composed of the slightest materials, *'in tiers of beds, as close as a crowded transport, numerous individuals sleep.* They go out to their work at an early hour, and return at gun fire, locking up their miserable places of nocturnal shelter during the day, and leaving them saturated with the steams of their bedding, their food, and the overflowing receptacles of their ordure. The detail would be too disgusting to be entered upon; but I most respectfully submit to Your Excellency the indispensable necessity of sweeping away the whole of those sheds, which I have every reason to suppose are unauthorized by the Government, and are solely the offspring of the most sordid avarice. So confident have been the owners of these sheds as to their permanence, that some of them are actually covered with sheet iron—a measure which, while it may tend to put money into the pockets of the owner, by preserving the wretched sheds, must especially conduce to render these places hot-houses of contagion.

Might I presume to offer my opinion, a committee of civilians, military and medical officers, should be immediately appointed, to enquire into the state of all the temporary buildings throughout the garrison, and if they are deemed incompetent for the purposes of human accommodation, and with a risk to public health, that they may be forthwith razed to the ground, as I understand many of them have heretofore been, although subsequently, from increased demands *'on the part of the lower orders'* for shelter, they have sprung up with incredible rapidity, contrary to the spirit of those admirable police regulations which were laid down by Your Excellency.

Although my recent observations have led me to a positive conclusion with regard to the state of District No. 24, I cannot doubt that all the other districts are comparatively in

a similar state. 2d. Without wishing to implicate any individual in a charge of neglect of duty, I would suggest that the police serjeants of districts should receive the most positive orders to attend especially to the duties connected with the cleanliness of the places committed to their care. On this subject, I shall only say that a most respectable medical officer has stated to me, that he '*rarely sees a police serjeant perambulating his bounds;*' and, in truth, the veracity of his assertion was confirmed to me by *more senses than one*. Under this head, I may mention that I had repeated evidence that Your Excellency's orders, with regard to placing barrels, buckets, &c. for the reception of dirt in commodious situations for removal by the scavengers, appear in many cases to have been altogether neglected.

I shall feel it both a duty and a pleasure to accompany any committee that Your Excellency may think proper to appoint, to examine into the *multiplied causes which at present threaten the public health*. I shall lose no opportunity of visiting every part of this garrison, and shall report to Your Excellency every circumstance which, in my opinion, may tend to the preservation of the public health.

In consequence of Your Excellency's private note of this day's date (of 3 o'clock) I have had the drains alluded to opened up, washed down, and impregnated with quick lime; but all these measures must fail, if the spirit of Your Excellency's General Police Orders are not strictly and conscientiously attended to.

I have ordered the medical officers, of all ranks, to be upon the alert on this occasion, and I shall endeavour to second my orders by my example, and

I have the honor to be, &c.

(Signed) J. HENNER, M. D.
Inspector of Hospitals.

To His Excellency the Governor,

§c. §c. §c.

That the accumulation of animal and vegetable corruption within the garrison, during the year 1828, was immense, Mr. Fraser thinks will be admitted by every one acquainted with the place. He says it is an incontrovertible fact, that the drains generally, for some months prior to the breaking out of the fever, were loaded with putrid matters—many of them being obstructed—some of them burst. The noxious vapour exhaling from them, he observes, was, at times, so powerful as to produce *vertigo and vomiting* in several individuals. He does not wish, however, to infer that the exhalations from these drains were the sole cause of the fever—he only means to shew, that decomposed animal and vegetable matters were in greater abundance in 1828 than in many preceding years. In respect to Dr. Barry's averment, that "there are no poor, not a single beggar" in Gibraltar, Mr. Fraser offers the following observations.

"It is true, a person is seldom seen in rags, in the public streets, openly asking for charity; but the misery of many individuals is not the less on that account; and I know that wretchedness and poverty prevail here, to a degree equal to that of any other town having the same number of inhabitants. Begging in the streets is forbidden; but the following answer of Mr. White, Collector of Revenues, to the Board of Commissioners, at its 21st sitting, 16th March, 1829, will show the condition of the lower orders.

QUESTION:—Have you found in your experience, as Collector of the Crown Rents, cases of deep distress and penury amongst the lower order, who were tenants of the crown immediately preceding the epidemic? and have you any reason to know, from any other means open to you, that similar cases of penury and distress were numerous in the garrison, amongst the foreign population or natives, in 1828, previously to the epidemic?

ANSWER:—I have. From the time that I came here, in August, 1827, it has been difficult to collect the rents of the small renters. This difficulty became each month greater, until a few months previously to the epidemic, to get any rent from the small renters without bringing them before a magistrate;—and even then I often got nothing, for there was nothing whereon to levy distress. I have further to state, relative to the distress of these small renters, that I have, several times, caused their dwellings to be visited, when they

were always reported to me to be in a wretched state, by Mr. Woodward and different other people. One particular room was reported to me by Mr. Woodward, as containing a family of ten persons, who, if stretched on the floor, could not, calculating according to, or by, Mr. Woodward's measurement, have more than four inches between each two persons. Many of the King's rooms were also found, at night, to be occupied by *beggars*, and people of other description, who, at the dawn of day, disappeared, and could not be found during the day." 14.

M. Fraser next proceeds to examine the sixth and seventh postulates of Dr. Barry, which stand as follow :—

6. "Nine persons were sick of '*some fever*,' and two died on board a ship from the Havannah, on her passage to Gibraltar, in the Summer of 1828—whilst this ship lay in quarantine from 27th June to August; three more were ill, and one of these was received into the Civil Hospital on 6th August, as '*febris intermittens*,' but he had no paroxysm after admission.

7. The first two persons taken ill, were the son and daughter of a bomb-boat man; they had been on board some ship shortly before. One died on the 17th, the other on the 20th August; both yellow, both with dark vomiting. The family of the health guard of this ship was attacked on the 21st August. A servant-maid in the Civil Hospital on the 23d August. The one military case was on the 2d September. This man lodged between the two houses first attacked."—BARRY.

In reference to the first Postulate VI. Mr. F. remarks thus :—

"Suppose one thousand persons had been sick of '*some fever*,' as Dr. Barry calls it, on board a ship from the Havannah, and that the whole had died—what does it prove? Nothing; unless that *some fever* can be incontrovertibly shown to have been contagious, and to have prevailed in the Havannah at the time the ship sailed, and to have been introduced into this garrison from the ship, by communication or contact of infected persons or goods. I say it proves nothing.

It would lead me far beyond the limits I have prescribed to this paper, were I to enter into the detail of all the means practised to fix the blame on this ship. Suffice it to say, that the Board of Commission already alluded to, after wading through a mass of evidence, and listening to the stories of witnesses got up for the occasion, came to the conclusion (the majority at least) that there was not the slightest proof for referring the introduction of our epidemic to the ship *DREDEN*, or to any other vessel. I subjoin the opinions of Colonel Chapman, Civil Secretary, and of Judge Howell, both of whom may be supposed capable of weighing evidence as fairly as any other of the members of this Board. They are as follows :

Colonel Chapman. "Judging from the evidence produced before the Board—the manner in which it has been given, together with the description of persons who have been brought forward as witnesses, I am decidedly of opinion, that the late epidemic disease is of local origin. As to the importation of the late epidemic, I am of opinion that the attempt to prove the introduction of the disease, after months of previous enquiry by those who wish to prove it, have totally failed."*

Judge Howell. "Upon a careful review of all the proceedings before this Board, I am of opinion that the evidence brought forward has totally failed to prove that the late epidemic disease was introduced from any foreign source, either by the Swedish ship *DREDEN*, or by any other means; and I am farther of opinion that the late epidemic had its origin in Gibraltar."*

As to the three sailors said to have been taken ill whilst the *Dygdén* lay in quarantine, one of which was received into the Civil Hospital as "*febris intermittens*,"† the following answers given Mr. Fraser himself to the Board of Commissioners, are set forth in opposition to Dr. Barry.

* Vide Board of Commission, 46 sitting.

† Why Dr. Barry alludes only to '*one man*,' when he knows there were '*two*' admitted

QUESTION. "Do you recollect two men belonging to the Dygden having been admitted into the Civil Hospital? When were they admitted, and with what complaints?"

ANSWER. "I do. John Glisson was admitted into the Hospital on the morning of the 7th August, and William Barrow on the evening of the same day. I have since understood that these two men were discharged from the Dygden, the day previous. John Glisson had a *contusion* of the arm. William Barrow was admitted under the head of '*intermittent fever*;' but showed no symptoms of fever, during his stay in the hospital; and was discharged three days afterwards. He appeared to labour under a chronic affection of the liver, or *HEPATITIS*. He was much wasted in muscular strength, and had a dark marasmal appearance."

QUESTION. "Did you enquire into the previous history of this man's disease, and did you take any notes of it?"

ANSWER. "I noted the following in the Medical Register, viz. 'Admitted from the Havannah, where he has had fever.' I think these are the words noted in my Register."*

As to the third case of sickness on board the Dygden, Mr. F. thinks that Dr. Barry must allude to the mate of that ship, for whom some medicine was procured at the hospital by one of the merchants of the rock, who merely stated that the man had head-ache, and was costive.

"Such is the front and bearing of one channel on which Dr. Barry rests his proofs of the introduction of a contagious distemper into our garrison—one man '*said*' to have had '*ague*,' at the Havannah—a second, a '*contusion of the arm*'—and a third '*constipated bowels*!!' Now, let us see on what grounds the Doctor rests his other proofs of introduction; and first, for the bomb-boat man and his crew. The Doctor here, with his usual tact, and as if not satisfied with sending one or two men to the Civil Hospital from the unfortunate Dygden, labours hard to establish a more direct line of introduction, and tells a plausible story enough of the communication in which this bomb-boat man, his two children, and a boy, had with the ship; and says that they all sickened soon after being on board, and that three out of four died. This is all very pretty; and, on paper, looks well; but let us examine a little more particularly into the real facts of the case, and then the unbiassed can judge what degree of credit is to be given to this part of the Doctors statement.

The whole story hinges on the evidence of a boy named Caffiero, not thirteen years of age, and a few washerwomen:—and, were it not trifling with the time of the reader, as well as my own, I could here recapitulate the whole evidence as given by these worthies before the Board of Commission: but it is so truly contemptible, and so much at variance with truth, that it disgusted every honest man who heard it. I shall pass it over '*sub silentio*,' and content myself by quoting the declaration of the bomb-boat man's wife, named Fani, as given before a competent authority, and who is ready to confirm it on oath if necessary. I shall also quote her answers before the Board on the same subject, which are of similar import.

Gibraltar, 14th November, 1829.

Catalina Fani, widow of Felix Fani, (alias Mabila) has this day made a statement in presence of the undersigned to the following effect, and which, if required, she states her readiness to corroborate on oath, before competent authority.

Declares herself to be the widow of Felix Fani, who died in the Autumn of last year.

into the hospital, I am at loss to know; unless the one '*febris intermittens*' suited the Doctor's purposes better than the other, which was a case of '*contusion*.'

* Vide Board of Commissioners, 37 sitting, 19th April, 1829.

Says that her husband was about 68 years of age, and of a broken constitution, that he had resided in Gibraltar about 33 or 34 years.

States that in 1804 she was the wife of a man named Salvador de Ortega, who was then the intimate friend of Felix Fani, the person above alluded to, and to whom she was married in 1805, after the death of her first husband (Salvador de Ortega,) who died of the epidemic fever in 1804.

States and is ready to make oath, that her second husband (Felix Fani) had in 1804, a severe attack of the epidemic fever* of that year; and that she and her first husband (Ortega), visited him frequently. That in fact, she herself attended him jointly with another woman since dead. That during his illness, his residence was in a small house at the bottom of the stairs in front of the Civil Hospital, then called the Blue Barracks. That during the epidemics of 1813 and 1814 her husband resided in Gibraltar without experiencing any indisposition from the fever of those years.

States that after the death of their two children, (Salvador and Catalina Fani) mentioned in the proceedings of the Board of Commissioners to have taken place about the middle of August 1828, her husband became greatly distressed in mind; that, on a certain Thursday, the police came to their house, to warn them in common with others of the district, to remove into camp. That on that day, her husband particularly complained of a large rupture which he had had for many years, and which occasionally troubled him, being worse than usual, and increased in bulk. That she had her husband brought to the Civil Hospital next day, where he was seen by Mr. Fraser, and others: but not being a fever case, he was sent back to his house. On the evening of the next day, they were, like all others in her district, sent to camp on the Neutral Ground.

In camp, her husband was seen by Dr. Hennen, and others; but was not ordered to the Lazaretto, to which all fever patients were sent. He died in their tent, on Monday morning—the tent was not ordered to be fumigated or washed by any one, and that she took no precautions to prevent contagion, as she was sure her husband did not die of the fever. Declares that there was no vomiting, no yellowness of skin, or other usual signs of a bad fever. Says that he complained greatly of a pain in his throat, and that it was a question among the medical men who saw him, as to bleeding him; but that they said they had no lancets with them.

With reference to her husband having gone on board any ship in the bay, at any time last summer, she most positively asserts that it was not so, as he never went out any where (he being an old infirm man) without telling her. Is sure that he had not been in a boat for ten years past.

She is equally certain that her two children (Salvador and Catalina Fani) were not on board any ship or boat, as stated in the proceedings of the Board of Commissioners, as they were always under her eye, and were not running about like other children, or ever in the habit of going on the water.

States that, with respect to the boy Francisco Caffiero, neither she herself nor any of her family knew any thing about him, and that what he stated to the Commission, as to her boy Salvador, (13 years of age,) and Catalina, (11 years of age,) having gone on board of ship, is 'a made up falsehood.'

States that her children had not any of the symptoms of the epidemics of Gibraltar, with which she has been familiar during her long residence. That the Doctor (Lopez) observed some indigested portions of figs in what they passed by stool. That they had no vomiting. That their appearance after death was not changed like that of those persons whom she has seen die of the yellow fever, and that she cannot make herself believe that they died of that disease.

Says that during the illness of the children five of their play-mates (the children of her gossip Joaquina) constantly came to see them, but that none of these children were taken

* According to the doctrine of Dr. Pym, this man was impregnable to a second attack, and could not have had the disease in the epidemic of 1828; although the contrary will be seen to be inferred by Dr. Barry.

ill. That the whole of these children, however, passed the epidemic afterwards, when permission was given to some of the families to return to their expurgated habitations.

(Signed)

A. BROWNE, M.D.

Assist. Surg. 23d R.W.F.

J. GILLCREST, M.D.

Surgeon 43d Regiment.

HUGH FRASER,
Surg. of the Civil Hospital.

I, the undersigned, do hereby certify, that on this thirteenth day of May, one thousand eight hundred and thirty, Catalina Fani, in the foregoing statement named, appeared before me, and I then interpreted to her the whole of the said statement, which she confirmed in every particular, in the fullest and most positive terms, and added thereto, that her late husband had, for several years previous to his death, left off going at all into the Bay, and that, being an old and infirm man, he gained his livelihood by purchasing tobacco and making it into cigars.

(Signed) ALEXANDER SHEA,
Not. Pub. Gibraltar.

This declaration, Mr. Fraser thinks, must negative the idea that any of the four persons in question had gone on board the *Dygden*, or into the bay—or that Felix Fani died of the epidemic, since the man was destroyed by *strangled hernia*. It is very doubtful of what disease the children died; but Mr. F. thinks it proved beyond all question that they did not die “with yellow skin and black vomit,” as asserted by Dr. Barry.

Mr. Fraser next proceeds to the case of his own servant maid, who is stated by Dr. Barry to have been attacked with the fever on the 23d of August.

“This woman (a Portuguese) had been in my service three years. On the *third* of August, 1828, she had an attack of fever, which endured with severity for ten or twelve days—her skin became yellow, and she suffered from irritability of the stomach. I considered her disease at the time, in common with Mr. Peter Wilson, late of this Hospital, to have been one of those sporadic attacks of yellow fever, which every now and then appear here. I stated my belief at the time to several members of my family, that her disease probably arose from the proximation of an extremely foul drain to the window of her bed room. On the 2d September, Dr. Hennen, in company with other medical officers, visited this hospital; and, in conversation, I remarked, that we ought to be extremely circumspect in giving farther alarm of fever, for that, in the event of its subsiding, the public might be inclined to attach censure to the energetic measures which he (Dr. Hennen) was adopting with the view of suppressing the malady; at the same time mentioning the case of my servant maid, as also the servant of Mr. Hassan, Keeper of the Civil Prison, who had been similarly attacked, and who lived in District No. 5. Dr. Hennen noted these two cases at the time, and directed his clerk, who was present, to have them appear in the sick report of that morning, which they do; and opposite to my servant it is thus written—“Servant to Mr. Fraser, who has been ill more than a week;” clearly showing the inaccuracy of referring the date of attack to the time of being reported, as the insertion of the cases into the morning state, was merely intended by Dr. Hennen to show all the cases of fever which had come to his notice during the month, and the remark of the clerk, had been made of his own accord, without knowing any thing of the particulars of the case. This fact I more than once mentioned to Dr. Barry; so that it is not in ignorance that it is brought forward in support of his favorite doctrine. The obliquity of the Doctor's intentions is indeed very apparent here:—observe how studiously he keeps out of view the servant at the Civil Prison, though appearing in the same report. But here there was a link wanting in the Doctor's chain: no contact with infected persons or things could be shown—neither John Glisson, or William Barrow of the *Dygden*, or any of the bomb-boat man's crew, had been near the Prison.

In respect to the first military case of fever that occurred, on the 2d of September, Serjeant Oldroyd, Mr. Fraser avers that Dr. Barry is incorrect

in making him a lodger in district 24, "between the two houses first attacked." The man was not married, and had no permission to lodge or sleep out of the barracks. It has been stated, indeed, that this man kept a woman in the above district—and if so, Mr. F. does not wonder at his imbibing the febrile fumes of that foul locality during his visits to his paramour. Mr. Amiel, however, surgeon to the regiment, in his examination before the Board, at its 17th sitting, (7th March,) observes that Oldroyd "was found drunk and disorderly under the bridge of the Naval Hospital, two days before he was taken to the hospital, i. e. 31st of August," a place which afterwards proved a hot-bed of fever, and where he thinks the serjeant was just as likely to have contracted his fever as in district No. 24.

"POSTULATE 8.—This disease left upwards of 5000 persons untouched, who had passed it before. There is not a single authenticated case of second attack in Gibraltar.

Of 164 military orderlies in the regimental hospital 141 caught the disease. Of 61 civil attendants who volunteered to attend the military sick (being largely paid) two only were attacked, and these were the only persons of the 61, who had not passed the disease in some former epidemic. This fact is taken from the official returns of regimental surgeons."

The doctrine of 'non-liability to a second attack,' as it now obtains in Gibraltar, is an imposing argument, more specious however than real; it is obviously one open to much fallacy; for the proposition is more or less assumed. Have the 6000 persons alluded to been all interrogated, as to the nature of their first attack? Have none of them left the garrison for other countries and returned? has it been ascertained that all these people lived within the circle of epidemic influence in 1823, and if so, is it certain that none of them sickened to a greater or lesser degree? did none pass through a sub-acute form of the malady? Knowing that none of these interrogations can be answered in the affirmative, I hold it to be ridiculous to argue further; for no conclusions could be drawn that would not be open to most serious objections. The experience of another epidemic, or more, will be hardly sufficient to place this question on such a basis as to be useful to the profession. It must, however, be acknowledged to be a belief, at present held by the natives of Gibraltar and of Spain, paramount to all others, except their conviction in the truth of the importation of the disease; but it does not follow they are correct. The history of man, in every age, shows him prone to embrace notions, however false, which pamper his hopes, and allay his fears; and to tell any of these natives, that a first attack of yellow fever was not to exempt them from a second, would be received with the same repugnance, as the telling an old and pious lady on her death bed, that men of erudition had doubted the existence of her soul. That a belief so rivetted, has the most salutary effect in resisting a second attack, no one can deny; for it renders the system impregnable to the impression of fear, which all who have witnessed an epidemic of yellow fever, will admit to have a powerful influence in keeping up and extending the disease. But, as the object of this paper is not the discussion of speculative points, I shall proceed to the examination of the proofs on which the immunity of these 5000 people is said to rest.

At the time that the Board of Commission sat here, a Board of Medical Officers was ordered to investigate this subject. It was composed of the French commission, Drs Chervin, Louis, and Trousseau—Dr. Barry and myself—besides some half-dozen Spanish doctors; but the principles on which it was conducted, were, to me, as well as to Dr. Chervin, so objectionable that I addressed a letter to his Excellency the Governor, expressive of my sentiments on the subject, and refusing to sign its proceedings. The letter is as follows;—and shows, in a tolerably clear manner, the spirit which influenced this board.*

* I regret not being able to give a copy of the letter of Dr. Chervin refusing to sign the proceedings, and containing his dissentient opinions, which he also addressed to His Excellency the Governor on this occasion.

Gibraltar, 1st April, 1829.

Sir,

In reference to the Board of Medical Officers assembled at your Excellency's order, in the chronicle of the 24th January last, to examine into the liability or non-liability of a second attack of the epidemic yellow fever which prevailed here last year, and of which Dr. Pym did me the honour to be associated a member, I beg to remark to Your Excellency, that, at a meeting held yesterday, for the purpose of concluding and signing the report to be made to Your Excellency on this most important question, I felt myself reluctantly obliged to dissent from the conclusion therein given; and, it is with much concern, I have to state to Your Excellency, that when this report shall be laid before Your Excellency, my signature will be found to be wanting. I entreated the Board to sign '*dissentient*;' but this was refused. I am therefore most anxious to make known to Your Excellency the reasons which have induced me to adopt such a measure, and with this view, I beg to enclose a copy of what I wished to accompany my signature.

Your Excellency, I trust, will do me the justice to believe, that I am not actuated by a desire to be troublesome; or that an obstinate self-will, or any over-weening conceit to be singular, is my motive:—on the contrary, I solemnly declare to Your Excellency, that I am guided by no other feeling than a conscientious adherence to what I conceive to be the truth, and I cannot help observing to Your Excellency that had the enquiry in question been conducted on more enlarged and on more philosophical principles, I humbly think the results might have been different, and more in accordance with the principles of true reasoning. Your Excellency is well aware that the laws which govern pestilence are but little known; and that it is becoming to speak doubtfully, and to speak with modesty, on a subject so very obscure, and so very open to be darkened with fallacy. I therefore hope Your Excellency will approve of my not having attached my signature to a document which I am disposed to consider somewhat faulty.

I have the honor to be, &c.

(Signed) HUGH FRASER, Surgeon.

His Excellency Gen. Sir George Don,

&c. &c. &c.

Dissentient—1st. Because moral testimony has been refused—the only testimony which, to my view, possibly could have been accepted to confirm the question of the liability or non-liability of an individual to a second attack of the yellow fever. Upon such testimony rests the whole of the valuable facts collected by the Board of Commissioners and the Anglo-French Commission. Had this species of testimony been received, many instances of second attack during the late epidemic might have been adduced.

2dly. Because the numerous relapses which have occurred during the epidemic fever of 1823, negative, in my opinion, the supposition that the malady bears any analogy to the order of exanthematous diseases; besides many of the relapses are of such a nature as to induce me to consider them unequivocal examples of second attack.

3dly. Because the immunity which has been observed in Gibraltar, appears to be entirely dependant on the individuals seldom changing their place of residence—very seldom the latitude. Viewing this fever, therefore, to be of malaric origin, the immunity observed, is a matter of no surprise:—it is in perfect accordance with what has been recorded of the black vomit fever of the West Indies, and America; where second, and even third attacks have been known to take place, whenever the individual lost his climatic constitution by residing a certain time in a northern latitude."

That the doctrine of non-liability to second attacks has been "fairly" brought before the public, Mr. Fraser denies. A species of evidence, he observes, is admitted as proof, when it favours the doctrine; but is refused when it has a contrary tendency.

"For example, two men come before the Board, who had been ill (we suppose during some former epidemic) with exactly the same symptoms—namely, headach, pains in the joints, sickness, and nausea, with other marks of fever, and both recover. Another epi-

demie takes place—one of these men escapes, the other is seized with the fever—the man who escaped, according to the mode in which this Board received evidence, would have been put down as a case of immunity; the other, as not having had the fever at any former period, and, of course, a case of first attack—only, forsooth, because the man must have been mistaken as to his first illness!! In short, the *slightest indisposition* during any former epidemic, was put down as an attack of the fever, when the individual escaped during the last.”

Mr. Fraser, however, does not attempt to deny that the cases of immunity have been very numerous—but the rule of immunity is far, he says, from being absolute. In papers which he is preparing for the press, “many well-authenticated cases of second attacks will be shewn.”

“Without vouching for the accuracy of the 225 hospital attendants taken ill among the military, during the epidemic, according to Dr. Barry, the simple statement of facts is:—

1st. That, for the period of about one month from the commencement of the epidemic, no hospital servant was taken ill at all, though in the closest attendance on the sick.

2dly. That when the disease began to appear among them, it was not until it had begun amongst the inhabitants of the south district, in which the hospital for the military is situated.

3dly. That the first hospital servants taken ill, were the cooks and watermen, whose services did not bring them into the wards of the sick.

4thly. That, according to a nominal list (by Deputy Inspector Gillkrest, lately surgeon of the 43d Regiment) officially given in to the Board of Commissioners at their 45th sitting, it appears that of 69 men of the 43d Regiment, who, during the first month of the epidemic, were exposed in the wards day and night, in parties of from four to six each, for the space of 24 hours, the number of them attacked was found at the close of the epidemic, not to have exceeded the proportion of the general mass of the regiment attacked. Two thirds of them indeed were never attacked at all; and it was shown by that list (signed by the Adjutant of the Regiment) that those of the above 69 who were taken ill, had mounted guards in the town, and after they had been on duty in the hospital; and that the bulk of them were not taken ill till a period of from 15 days to two months, after performing the duty referred to.

5th. That it appears that in hospitals placed out of the influence of the infected atmosphere of the rock, no servant was attacked, though several were exposed, who were susceptible in the sense of not having had the disease before. This was shown to be the case, in the hospital establishments of the 73d and 94th, removed about the middle of the epidemic season to Wind-Mill-Hill Barracks and in the small hospitals of the 12th, 42d and 43d Regiments, established near the close of the season, outside the walls, near the neutral ground.

We regret that we are unable to afford space for the table of cases *not febrile*, admitted into the Regimental Hospital of the Royal Welsh Fusiliers, from the 1st of September till the 30th of October, shewing the number of men attacked there by the epidemic, and the length of time that must have elapsed after their exposure to the contagion (if it existed) and the coming forth of the fever.

“Taking the mean time of exposure in residence in hospital, and the interval from this mean to the date of attack, as the latent period of Bulam, the mean latent period in the eleven subjects attacked, will be, setting fractions aside, no less than 33 days! the duration of exposure of the eleven attacked, taking the mean and setting aside fractions, is 10 days, while the exposure of the 25 who escaped the contagion, is, setting aside fractions, 14 days.”

The postulates 9, 10, and 11 remain to be noticed.

“Three modes of treatment—1st. Mercury with a view to salivate rapidly. 2d. Free

bleeding. 3d. Oily and other mild aperients. The first was by far the least successful, the third the most so.

10th. Some cases (7) of icterus appeared in 1829, from May to September. Three of these had no fever—four had passed the disease in other years.

11th. No atmospheric or other physical phenomena different from those of the five preceding years, were noticed in Gibraltar in 1828."

"Dr. Barry's opportunity of forming a correct estimate of the comparative merits of the different modes of treating yellow fever were so extremely limited, that any observations of his, on this head, must be received with caution. He arrived towards the decline of the disease, when it had assumed a milder type, and perhaps did not see twenty cases altogether;—nevertheless, he had the modesty to condemn the use of '*mercury*' in toto, before he had seen a single case; and took no small pains to deprecate it as the most ruinous and pernicious of medicines.

A small detachment-hospital on the glacis, on the north front, was given in charge to him, and it was very soon discovered that his success was not greater than that of his neighbours, with all his boasting; for I believe that even by the aid of his own energetic treatment of a *calapasm of port wine and bread* to the pit of the stomach, and *fire leeches to the ankles* he lost every fever-patient under his care, who had the disease in a severe form. Of this latter description of patients, however, he had but very few. None of us, it is true, can boast of much success in the treatment of the disease; those, however, of the greatest experience, are inclined to give the preference to the medicine which was so much and so loudly condemned by Dr. Barry. I myself, indeed, believe that, in the more concentrated forms of this fever, it makes very little difference what mode of treatment is adopted. The disease will run on to a fatal termination. With regard to the anatomical characters of the disease, to which I promised to advert, the Doctor's opportunities were equally limited with those he had of treating it. On arriving here he put himself under canvas, on the Neutral Ground, beyond the reach of the epidemic influence, and only had charge, as I have stated, for a short time, of the Detachment-hospitals of the 12th, 42d, and 43d Regiments, where the mortality, I believe, did not exceed eight or ten; and to the pathological knowledge that was to be gained elsewhere at the Military and Civil Hospitals, the Doctor was a stranger, for I can assert, without the fear of contradiction, that he very seldom visited either of these establishments, so that, in truth, any facts advanced by him on these two heads, can be only from *hear-say*; and I shall take no farther notice of them."

Mr. Fraser animadverts on Dr. Barry's assertion that there were no atmospheric or other physical phenomena in 1828, different from those of the five preceding years. The average heat of the last four months of 1828 was greater, Mr. F. avers, than of the preceding years; though he pretends not to attribute the fever to this source, nor to explain why epidemics are produced in one year more than in another.

We must now close our review of Mr. Fraser's paper, reiterating our regret that men who see the same facts should so materially differ in the relation of them; and still more in the inferences which they draw from those facts. For our own parts, we greatly distrust the evidence which has been so often brought forward, in various countries, for the support of the doctrine of imported contagions. It is a most unnatural, and unfeasible doctrine, and is every day losing ground in the opinions of those best qualified to form a correct as well as an unbiassed opinion on the subject. The fact, if it be one, that an attack of the Gibraltar fever confers an immunity from subsequent seizures, is a very curious one, but we apprehend it will turn out to be nothing more than that degree of security enjoyed by those who have undergone any severe fevers either in northern or southern countries. How few do we find encounter a second attack of typhus fever in London? It would probably be extremely difficult to collect a dozen of well authenti-

cated cases of this kind. Fevers are very different from inflammations, in this respect. The latter, predispose the individual to repetitions of the disease even from slight causes—whereas the former, confer a considerable power of resistance to the common causes that produce the first attack.

VII.

ON THE DISEASES AND INJURIES OF ARTERIES, WITH THE OPERATIONS REQUIRED FOR THEIR CURE. By *G. J. Guthrie*, F.R.S. &c. &c. &c. Octavo, pp. 408, London, 1830.

[Second and concluding Article.]

IN the last quarterly number of this *Journal*, we gave a pretty full analysis of the portion of Mr. Guthrie's work which comprises the injuries to which the arteries are exposed, and the most appropriate methods of treating them. It now remains for us to notice the first and more copious part, which is dedicated to the important subject of aneurism. It might be thought that the labours of the many eminent individuals, whose researches have thrown a halo of glory on the surgical annals of the close of the last, and commencement of the present century, would have rendered unnecessary any further investigations on the diseases of the arteries. Guattani, Lancisi, and Scarpa in Italy; Pelletan, Corvisart, Dessault and Laennec in France; and more than all, the galaxy of genius which our native land can boast, Hunter, Abernethy, Allan Burns, Home, Cooper, the Bells, Hodgson, and Guthrie, have left, one would imagine, little more to desire on the subject that exercised their observation and their talents.

But such is the imperfection of the human mind, or the inherent difficulties of the sciences which it creates and which still perplex and baffle their creator, that the accidental or morbid lesions of the nervous system are yet in need of further elucidation. What physiology, anatomy, and the keenest observation could do, may be fairly said to have been done already, but our forefathers and predecessors were in want of a weapon that peculiarly distinguishes us, we mean the extensive employment of post-mortem investigations. It is like the invention of gunpowder in fiercer warfare than our own; and will simplify tactics, if it does not save lives. We have for some time been convinced that the connexion between the diseases of the heart and the arteries is one that requires the most careful, close, and extended study. It must be the work of some years spent at the bed-side, in the hospital, and in the dead-house. If a man of moderate talents will devote his time to this investigation, and throw on it the lights which auscultation certainly affords, we prophecy, and we do it with a little knowledge of the subject, that the result will be highly beneficial to his profession, his species, and himself. Such a plan as we have chalked out must require some years to be properly put into effect, but much may, and we doubt not will, be done by able and observant surgeons in the interim.

If some of our readers imagine that we already know as much as is likely

to be practically useful, we beg in reply to direct their attention to the various papers on the heart and circulation, which appear from time to time in the periodical publications. So little of certainty is there on these topics, that Harvey and Laennec are at variance on the rhythm of the heart, and later writers, like Dr. Williams and Dr. Corrigan, hold opinions differing from either. Can it be said that a state of doubt and difficulty such as this, is a safe foundation whereon to rear pathological and diagnostic structures? Or can it be denied that very much is yet wanted to arrange our ideas and to settle our theories? We do not expect a millenium—far from it; this will only be found in the brains of enthusiasts, or the pages of radical reformers. But we do expect, or desire at all events, an epoch in which our principles, with regard to the heart and arteries, shall become more stable and settled, and our facts established on less disputable evidence. But waiving any further remarks of this kind, we shall proceed to the consideration of the volume before us. We have given a tolerably full analysis of the portion which treats of the accidental injuries of arteries, because we fear the worse informed members of the profession have but very erroneous notions on the subject, and inflict no trifling quantum of mischief on their patients. It is somewhat different with respect to aneurism; not only are the common ideas of its nature more correct, but its management and treatment generally fall to the province of experienced men. This is not always the case, we allow, for we daily read of instances of aneurism, in which lancets have been thrust into the tumour by ignorant practitioners, under the impression that its contents were purulent. It cannot be supposed that any surgeon of the present day could write a treatise upon this disease, containing *much* more than is found in the works of Scarpa and Hodgson. Too short a time has elapsed since the appearance of those admirable volumes, to permit the accumulation of any great store of addenda. On this account we must be excused from entering on a full or complete analysis of Mr. Guthrie's observations; our object will be rather to communicate to our readers the particular remarks on received opinions which his judgment may direct; the important facts which his experience may have amassed; or the novel views which judgment, experience, and reasoning combined may elicit.

After giving a very good anatomical description of the structure and coats of an artery, our author makes the following very judicious remarks:—

“This capability for contraction, on the application of certain stimuli, gave rise to the opinion of arteries being muscular, but which has been disputed on account of their not being found by chemical analysis to possess the same component parts, and particularly the same quantity of fibrin, as muscles. The terms contractility, retractility, tonicity, &c. have therefore been preferred to that of muscularity. It is however a mere difference about a name; no one in the present day doubting or disputing the fact of the capability of an artery to alter its dimensions through the agency of a power distinct from elasticity, and which may with propriety be termed contractility. It would indeed be taking a very limited view of nature, to suppose that every thing possessing contractile powers must be muscular, because we know that a muscle contracts.” 5.

This appears to us to be the true state of the case, and Mr. Guthrie's manner of advocating it is so clear as not to require further comment or elucidation. Passing over some physiological points, we arrive at the alterations of struc-

ture to which arteries are liable, a topic of the greatest importance in every point of view. Aneurism, unless it be the consequence of accidental violence, seldom takes place in an artery perfectly sound. Before the vessel yields to the impulse of the blood against its sides, in other words, before it undergoes dilatation, its elasticity and contractility are usually materially impaired by the deposition of atheromatous matter between its internal and middle coats, or conversion of one or both into membranes of a nearly similar character. It thus becomes a matter of some moment to understand, if possible, the laws which govern the formation of those depositions. From the earliest period of the cultivation of morbid anatomy, dissectors have ever longed to establish the existence of arteritis, nay more, to believe that it is a disease of frequent occurrence and peculiar characters. Hitherto their speculations have proved abortive; and not only are the symptoms of this disease unknown, but men of experience are dubious of its existence, or at all events have never witnessed its occurrence. For our own parts we place no confidence whatever in the descriptions of authors on the subject, and out of the number of bodies we have seen examined, we must say that we have never been sufficiently fortunate to discover arteritis. The *staining* of the inner tunics of the blood vessels, and more particularly of the aorta, has been often mistaken for inflammation; but after the masterly exposition of the error by Laennec, and the various papers that have appeared from time to time on the Continent and in this country, papers to which we have attracted the notice of our readers, no well-informed, experienced man would in future commit such a blunder. Mr. Guthrie divides inflammation of arteries into phlegmonous and erysipelatous, denominations which, though certainly objectionable in an abstract sense, are yet convenient when taken in his own. By the phlegmonous, is understood that healthy action which seals the cut or otherwise injured artery with coagulable lymph, obstructing the channel of the vessel it is true, but effectually preventing the occurrence of hæmorrhage. An artery thus obstructed degenerates at last into a solid, small, impermeable cord.

The erysipelatous inflammation is not an idiopathic disease, but succeeds an injury, and extends along the internal coat until it arrives at the heart, when, of course, it must prove fatal. Mr. Guthrie has only been able to verify its existence after death in three cases.

I have alluded to one case of this kind in my work on Gun-shot Wounds, page 96, third edition. The patient died suddenly and unexpectedly, the limb was greatly swelled and gorged with blood, the femoral artery, when opened, appeared more vascular than is commonly observed, its internal membrane was very red, and easily separated from the middle coat, and the fluid which lubricated its surface was of a more serous nature than usual, and greater in quantity. The other two cases I did not see until death was impending. In each, the right leg and thigh were greatly swelled and oedematous, the skin was of a pale dead white colour; the countenance was extremely anxious and bedewed with sweat; the pulse 140 and weak; the patient sensible, and expressing hopes of recovery. In both cases the arteries showed the same character of disease, which extended upwards as high as the diaphragm. I gave a portion of the femoral artery taken from one of these cases of disease to Mr. Brookes, who considered it to be one of the finest specimens of arteritis he had ever seen. The symptoms which mark this state of disease, when distinguishable, and several cases are recorded where the appearances described have been

noted, are a very quick pulse, a rapid deterioration of the state of the patient, and degeneration into irritative fever, with low delirium, followed by death.

In the three instances which I have mentioned, the erysipelatous inflammation of the arteries was evidently caused by continuity of parts with those already inflamed; and in all of them the inflammation was a deep-seated disease, situated in the muscles and internal structure of the thigh, the skin being apparently unaffected." 22.

Not having witnessed such cases we have nothing to remark, except that Mr. Guthrie is too well aware of the nature of the *staining* of vessels, to allow us to doubt of the accuracy of his conclusions. In the sloughing of the cellular tissue which seizes upon limbs after injuries in bad constitutions, nothing is more commonly observed than reddening of the inner tunics of the arteries, even to the heart. The symptoms are the same as those described by Mr. Guthrie, but the vessels are merely stained. So much for acute arteritis; and if men have been compelled by the difficulties of the investigation, or the strong counter-evidence of morbid anatomy, to acknowledge that they possess no positive information on its nature, nay, on its existence, still they have clung with almost foolish fondness to the idea, that we at least are sure of a chronic form of the disease. They have found, in the atheromatous and cartilaginous deposits of middle and advanced life, the data on which they triumphantly rely for confirmation of its prevalence.

Of these deposits, whether atheromatous or steatomatous, bony or cartilaginous, Mr. Guthrie gives a full and detailed account, which we particularly recommend to the attention of those who are anxious to become acquainted with morbid anatomy and the nature of disease. The subject is neither susceptible of analysis, nor sufficiently novel to require it. But, waiving mere description, we are met by the question of the origin and cause of these deviations from the healthy condition of a vessel. As we hinted before, our simplest notion of morbid causation is what we denominate inflammation—a more abstruse one, but scarcely less fashionable, is irritation. We neither quarrel with the names nor with the things, for we know full well how much more easy it is to destroy than to erect an edifice. But yet they can scarcely be considered as synonymous; for, although the one very commonly induces the other, and both do constantly occur together, yet, strictly speaking, the terms are intended to imply and convey an idea of dissimilar or distinct conditions. Mr. Guthrie, however, an able advocate of the inflammatory origin of the depositions in the coats of arteries, speaks of inflammation and irritation with an ambiguity and laxity of expression not at all characteristic of himself.

"Chronic irritation or inflammation, by which a slow change in the structure of a part is usually accomplished, appears to be the cause of the various alterations which are found in arteries. The first and simplest change is a loss of the elasticity natural to them, which may lead to a state of dilatation, without abrasion or rupture of any of the component parts of the artery, although sometimes accompanied by a general diminution of substance, and particularly of the middle coat. The cause which gives rise to the loss of elasticity seems, however, capable of exciting in the artery a sort of preservative action by which it may be strengthened. The loss of elasticity is, therefore, more usually accompanied by changes which are very obvious; such as softening of the inner membranes, partial or general irregular thickenings, or depositions of cartilaginous, calcareous, or other matters, between the coats of the vessel. It is well known that irritation may give rise to altera-

ations of structure of very different kinds; to the thickening of a part, to its partial removal by progressive absorption or thinning, and to its total removal by ulceration." 22

Without going over the grounds which induce Mr. Guthrie to maintain the foregoing opinions, we may mention what induce us to dissent from the supposition of chronic inflammation being the essential cause of the deposits. As elasticity and suppleness of structure is the characteristic of infancy and youth, so is rigidity that of old age. The thigh-bone of a child, instead of breaking, will bend, or, like a green withy, one side will split, and the other will yield in such a manner as to be more or less doubled on itself. The bone of an octogenarian, on the contrary, snaps like a dry faggot. So it is with the cartilaginous structures, the intervertebral for instance; the adeps is absorbed; the cellular membrane is tough; the skin becomes a shrivelled hide; pellucid membranes, like the cornea, become opaque; the viscera are coated with cartilaginous-like capsules; the bronchi are bony; and, lastly, the arteries are rigid. Surely it is unphilosophical to select any one of these facts for a separate argument; and surely, also, if we look upon the whole, as we ought, it would be absurd to attribute the series of changes which the laws of the Creator have stamped upon his work, to the process of inflammation. Is an old man a mere conglomeration of chronic inflammations in every texture of his body? This would be physiology with a vengeance, and yet to such a dilemma are we reduced, if we attempt to single out this or that alteration as evidence of its existence. A modern and very able lecturer has asserted, that inflammation is growth, and growth inflammation; if the present views be correct, the same must be said of decay; and thus from the cradle to the grave, we are all, like so many whitelows, specimens only of acute and chronic inflammation. To be sure this sort of philosophy is simple.

Dropping any attempt at satire, which we really disclaim, we must say that the arguments advanced in support of the inflammatory origin of atheromatous and steatomatous depositions appear to be inconclusive and fallacious. The chief are, a redness and softening of the inner membrane of the artery. Neither are constant—the softening, in particular, is not even frequent. We have examined a considerable number of cases in which the arteries were diseased, and we are quite convinced that, however a low degree or kind of inflammation may be set up at times, *in consequence* of, the irritation occasioned by the bony scales or atheromatous deposits, it has nothing to do with their formation. Setting aside the known indisposition of arteries to inflame, under circumstances highly favourable to the purpose, we think the manner in which the degenerations of the coats steal on, is strong presumptive evidence on our side of the question. Amongst hospital patients, it is rare to find the arteries perfectly healthy beyond the age of thirty-five or forty. The more muscular the subject, the more advanced are, *cæteris paribus*, the depositions; and, in confirmation of this view, we ascertain by the histories of cases that men who have lived or worked hard are sooner affected than those who lead a quiet, or even a luxurious life.

In persons of laborious occupations, the system is worn out before its time, a sort of premature old age is established, the left side of the heart becomes hypertrophic, the arteries grow rigid early, those of the brain, in particular, become opaque or even bony; and dropsy from the heart: aneurism, from

the vessels : or apoplexy, from the cerebral arteries, crown that youth of labour, so lauded by poets, with a melancholy termination between the ages of forty and forty-five. This is a true picture, too faithfully drawn from the life, and not a composition, as painters say, from fancy. In the higher classes, the progress of the constitution's decline and fall is something different. The heart and the arterial system are still the sufferers, those arteries and that heart which have borne the brunt of fiery passions, the wear and tear of foolish fashionable dissipation. The mode of decay is, however, as we said, dissimilar from that which cuts off the hard-working mechanic. The arteries are not usually so soon or so extensively effected ; the heart, instead of becoming hypertrophic, grows large, flabby, perhaps loaded with fat ; a disposition to yellowish fat appears about the trunk of the body ; the vessels of the brain grow opaque and inelastic ; and the face assumes a puffy and rather yellowish tint. These patients, on the whole, suffer less from dropsy than the lower classes, but are more affected with what is denominated *angina pectoris* ; for this is almost, par excellence, the disease of the elderly nervous and luxurious invalid. To revert to the cause and origin of the depositions in the coats of the arteries, we maintain that there is no positive evidence whatever of chronic inflammation, or of any thing like it ; whereas, an extended view of the changes which bodies undergo, from infancy to age, and dissolution, demonstrates, conclusively, that their formation depends on those inscrutable laws which regulate the animal machine so long as the vital principle retains its fragile tenement. When we know what makes a tooth to grow and a tooth fall out ; what covers the scalp of the babe with a flaxen down and the bald head of the sexagenarian with a few gray locks ; then, and not before, can we explain the reason why the aorta of adolescence is as smooth as ivory, and that of old age as rough and chapped as the integument of ichthyosis. It would be just as rational to imagine that chronic inflammation turns the hair white, as the arteries rough.

Before quitting the subject of the morbid alterations of the coats of arteries, we must advert to what has been denominated the "dissecting aneurism," a form of disease which Mr. Guthrie does not believe to be so rare as has been supposed.

"The simplest form is said to be that in which the internal and middle coats having given way, the external coat is only slightly separated by the blood effused beneath it. The chronic inflammation which preceded this state, having however thickened the general surrounding wall of the artery, the separation of the external from the middle coat is effected with difficulty ; the external coat becomes stretched and distended, and an aneurismal tumour is formed in the manner which has been so frequently described, although the accuracy of the description may be doubted. The separation to which I allude is much more distinctly marked, and the disease seems to have existed in the uniting medium, and between the coats of the artery, as much as in them : whilst the whole may be thickened, the separation is distinct.

In the first or simplest kind, the tumour formed by the effused blood is circumscribed, and usually small in size. In the case to which I refer, it is otherwise ; the blood is forced along the tube of the artery, separating in the simplest manner the external and middle coats from each other, and forming for several inches a long pouch or bag, which may or may not surround the vessel. In one case it formed a long pouch on the anterior part of the descending aorta, about six inches in length, extending to the sides, and in one place nearly surrounding it. A horizontal fissure, about half an inch in extent, near the upper

part of the swelling, allowed the blood to pass through the inner and middle coats, and to effect this separation, which could only have arisen from disease previously existing in the part. This occurred many years ago, and I was not then aware that it was a peculiar or uncommon appearance." 41.

M. Laennec records a well marked instance of this affection, in which the external was more or less separated from the middle coat, from two inches below the commencement of the descending aorta down to the bifurcation of the iliaes. The sac was filled with blood and polypus concretions. Mr. Guthrie has met with and describes another well marked case of this description, the descending part of the arch of the aorta being affected. We now arrive at the section which treats of:—

THE PRETERNATURAL DILATATION OF ARTERIES AND ANEURISM.

A clear yet comprehensive nomenclature of the different species of aneurism and dilatation is still a desideratum. It is astonishing what confusion has crept into the ideas of medical practitioners on this subject, for on making the examination of a body no two will name an aneurism alike. The partial introduction of Scarpa's views, has bred all this disorder, and the sooner they are discarded the better. The great stumbling block is the state of the internal tunics, some stiffly asserting they are ruptured in aneurism, others that they are not. Again, the varieties of dilatation are a bone of contention to systematic writers, and a bugbear to timid students; whilst the mode in which mere dilatation and aneurism, in the common acceptance of the term, run into one another, adds to the difficulties of the one and disputes of the other. We shall give Mr. Guthrie's ideas on this subject, that our readers may become acquainted with the results of his investigations in the Hunterian Museum, and other valuable fountains of information.

If the whole circumference of an artery be dilated, the coats of the vessel being more or less diseased, yet the inner tunic not so far destroyed as to have caused the deposition of lamellated coagulum, and obstructed the circulation, then this is called a *preternatural dilatation*. The arteries most frequently affected in this manner, are the aorta at its arch, and the innominate or carotids at their origin. It is not uncommon in the arteries within the cranium. We have said that in *preternatural dilatations* the coats of the vessel may be considerably diseased, nay, the inner coat may be fissured or abraded to some extent, and yet little or no coagulum is found attached to them. Sometimes, however, the tunics may be only thinner than natural, sometimes thicker and inelastic; we have seen them as dense and as tough as the sole of one's boot, and commonly in this state the internal surface is greatly puckered. When the preternatural dilatation has proceeded very far, coagulum may be formed, but they are rarely lamellated, firm, or fleshy; not even when the inner coat is abraded.

When the tumour grows from one side or part only of an artery, it is called an *aneurismal tumour*, and this may proceed from a vessel in the state of preternatural dilatation. If no deposition of lamellated coagula has taken place, and if the coats be not more diseased than those of the artery, preternaturally dilated or not, from which it has arisen, we should prefer terming it an *aneurismal dilatation*. If, however, the coats be more destroyed,

and lamellated or firm coagula exist in it, we should call it at once an *aneurism*. We are aware that the two latter differ more in fortuitous circumstances, than in nature or even degree, but still we think the definitions we have proposed would be more precise, than when both states are indifferently styled, aneurismal tumour.

It is not necessary, as Mr. Guthrie well observes, that the inner tunic must be removed or even materially affected in an aneurism, before the deposition of coagula takes place. This error, which derives its origin from Scarpa, must be exploded before we shall make any progress in our pathological notions of the disease. It appears, says Mr. G., that this change, the deposition of coagula, occurs *with the commencement of the alteration of the function* of the inner coat, and certainly before its removal by absorption. This explanation goes for nothing, for one aneurismal dilatation will shew the lamellated coagula, whilst another in a similar condition, as far as the tunics are concerned, will have none. The truth is, that our knowledge on this subject is extremely imperfect, although it may safely be received as a general rule, that the more the inner tunics are destroyed, the greater will be the likelihood of the deposition of lamellated coagula.

In large aneurisms the coagulum suffers a material change in the course of time, undergoing a species of decomposition, which perhaps leads at last to the insinuation of blood between the layers and to the ultimate rupture of the sac. Sometimes in old aneurisms it is quite opaque and firm, at other times partly transparent, and resembling horn or glue a little warmed and softened before the fire. In some cases, further changes will be found to have taken place exterior to this, and the matter deposited is softer, more easily broken up, and offering little opposition to the passage of blood through it. In some very rare cases of preternatural enlargement of the aorta, and of other vessels, the coagulum is found around the sides of the artery, leaving a passage for the blood through its centre as a proper canal. The preparation, No. 372, of the Hunterian Museum shows this very rare occurrence.

"When the walls of an artery yield by dilatation in any spot, not including the circumference, but (as is usually the case) on one side of the vessel only, and frequently in a small space, it is called a *true aneurism*; the internal and middle coats being found perfect on examination, even by maceration. This state of disease is for the most part only seen distinctly in small aneurisms, for as they increase in size, the inner and middle coats appear to be removed by absorption; they may perhaps in some cases be ruptured. The first step in the formation of an aneurism in a part of the aorta which is even preternaturally dilated, is the deprivation of a greater portion, if not of the whole of the remaining elasticity which the part possessed. This is followed, if not accompanied, in general by the deposition of a curdy yellowish matter at the spot, which now becomes dilated to the whole extent of the deposit, and this probably regulates the size of the opening between the aneurismal sac and the artery generally. The dilatation is usually at first more or less circular or oval, from the size of a large pin's head upwards, to any extent the artery will admit of. In some instances it seems to form a sort of split or fissure rather than an oval opening. If an aneurism of the size of a pea, or of the end of the finger be examined, by making pressure around it; a small quantity of the yellowish curdy matter may frequently be pressed out from under the inner coat, which yields to allow it a passage. If a careful dissection be made from without inwards, the three coats may be always distinctly shown, and this

same yellowish matter demonstrated as dependent on the middle coat. From the first moment that the aneurismal dilatation takes place, and before it is large enough to admit the end of the little finger; it becomes filled with a soft coagulum, forming a striking difference when compared with the enlarged but empty preternaturally dilated aorta in which this little aneurism is situated. From the moment the spot yields, so as to form the commencement of an aneurismal sac, the edge of the artery surrounding or enclosing this sac becomes thicker and firmer, so as to form a distinct thickened, yet well defined, although rounded edge. This edge seems to be the product of a healthier inflammation than that which has given rise to the deposit of the atheromatous or yellowish curdy matter alluded to. It is set up by nature to form a boundary to the mischief, as healthy inflammation is established in other parts of the body, previously to the formation of a line of separation between those which are mortified and those which are sound. Over this edge the inner and middle coats of the artery can always be traced; and even throughout when the sac is small, and for some distance beyond the edge when it is large. In this last case they soon become confused, and are often so blended together as not to be traced; although at others the termination of the inner coat may be seen, as if it had been irregularly removed or torn. It is only then in small aneurisms that the structure of the sac can be fairly traced; for when they have attained a large size, the aggregation of matters external to them, and the slow but continued action which is going on, render a distinct separation of the component parts of the sac impossible.

When the aneurism has increased in size to that point at which the inner and middle coats begin to be removed from the centre of the tumour, the external coat forms the sac. It does not usually remain of its natural thickness, or is simply dilated and thinned. On the contrary, from the commencement of the separation, and indeed before the removal of the internal coats, some degree of increased or altered action has taken place, which appears to be afterwards augmented. The pressure from the enlargement of the sac gives rise to irritation and the formation of adhesions with the surrounding parts, as if nature endeavoured to prevent the mischief impending from rupture. As soon as the sac meets with an opposition to its dilatation, arising from harder or more resisting parts, absorption begins; the sac becomes thin and is ultimately removed. The hard parts, such as bones, follow by that process of absorption called by Mr. Hunter progressive, in which that action of the small arteries necessary to constitute inflammation is wanting; there is therefore little comparative pain at the commencement of the process, and no formation of matter. Cartilages from their elasticity resist this absorbing process more successfully than bones; those of the ribs will remain after the bone has been removed; and the intervertebral substance appears to be unaffected, when the bodies of the vertebrae have nearly disappeared. After the hard parts have been removed, the progress of the aneurism is more rapid. The skin becomes distended, loses its furrows, and assumes a shining white appearance. This is soon changed to a copper-coloured hue: some one or more parts of the external tumour become elevated: the skin over them becomes dark coloured, and an evident slough is formed. This slough does not yet yield altogether; blood begins to ooze at the edge in one or more points, and slowly increases in quantity until it gradually destroys the patient; or a sudden and more rapid discharge at once closes the scene: a catastrophe which may in some instances be uselessly delayed, by supporting by compress and bandage the part which seems to be the weakest and the most likely to yield. When an aneurism protrudes into a cavity lined by mucous membrane, the process is much the same; but it is said that the opening which takes place into any cavity or canal lined by serous membrane, occurs by rupture and not by sloughing. In some very rare cases, when an aneurism approaches to and gives rise to inflammation of the periosteum covering the bones, ossific matter is thrown out, forming a sort of wall to the tumour, and impeding its progress in that direction; but I suspect a peculiar diathesis to exist under such circumstances." 58.

The foregoing description is extremely accurate, but we would abolish the designations of "*true*" and "*false aneurism*" as here applied, and substitute "*aneurismal dilatation*," and "*aneurism*" for them. The meaning

we have attached to the latter terms we have already mentioned. If an aneurism be formed upon a preternaturally dilated artery, it sometimes happens that the walls are thin, become dilated in consequence, and give rise to pouches or sacculi proceeding from the aneurism itself. Although aneurism for the most part argues a generally diseased state of the arterial system, yet it not unfrequently may exist in an extremity, and an operation be attended with a permanent cure.* Mr. Guthrie knew a man who survived the operation for popliteal aneurism in both limbs for twenty-five years, and died of fever at last. It has been stated lately that no vessel is given off from an aneurismal sac, but in many of the old operations vessels opened *into* it, and when there is a preternatural enlargement, the circulation will go on through it, and the arteries will arise from it.

Mr. Guthrie enters into a very just though spirited critique of the opinions and statements of Scarpa, opinions and statements which have done much good and much harm. For the criticisms in questions we must refer to the work itself, and shall content ourselves with the following short quotation.

"There are many very fine preparations in the Hunterian collection, which appear at first sight to support the opinion maintained by Scarpa, that a rupture takes place of the inner and middle coats of the artery in cases of aneurism; but a careful examination of them rather leads to a different conclusion. The oval, rounded, and even fissure-like opening would naturally seem to be the result of a rupture, such as has been described under the head of a dissecting aneurism, at page 43; and it is by no means intended to deny that this accident may occur in some instances. I have seen the inner coat, and even the middle one ruptured, in cases in which these parts had been previously softened by inflammation. The appearances observed on the dissection of the body of His Majesty George the Second are a proof of the occurrence, if others were wanting. Nicholls says, a fissure was found on the inner side of the trunk of the aorta, about an inch and a half long, from which some blood had recently passed under its external coat, and formed an elevated ecchymosis. These fissures or rents are usually found to take place in the circular direction of the artery, and in the course of the semicircular fibres of the middle coats, which may possibly account for their looking as if cut by a sharp instrument. They have been, although rarely, met with running in different directions; and when the parts have been ruptured irregularly, the rugged edges have been supposed to adhere to the outer coat, or to be gradually rounded off by time, so as to form the smooth, round, or oval opening, which is so frequently seen to be the means of communication between an aneurismal sac and the canal of the artery. Yet the gradual formation of this oval or rounded opening may be so easily traced from the atheromatous patch to a complete hole or fissure, that the evidence appears much more complete in favour of the dilatation followed by absorption of the inner and middle coats in internal aneurisms, than it is in favour of a rupture of them in the first instance. The last part of the argument *viz.* whether these coats, and especially the inner one, do or do not pass over the rounded edges of the opening, is an appeal to a fact which appears to be more easily demonstrable than it really is; still the prepara-

* It is in discriminating the cases in which the heart and great vessels continue sound or otherwise, that the stethoscope proves of the most essential service.

tions alluded to seem to demonstrate the fact in most instances in which they have been examined, or only to leave it doubtful from the point not having been sufficiently attended to. The truth is, that the subject has not yet been satisfactorily investigated; and the authority of Scarpa has perhaps hitherto prevented due inquiries being made, so as to leave, from a multiplicity of observations, no doubt of the real nature of the case. The preparations 388, and 367, A, deserve attention, being instances of the doubtful manner in which the aneurism has been formed." 77.

When an aneurism is formed through the rupture of the middle and internal coats and distention of the external, it is called a *false* aneurism. Where a *true* aneurism, i. e. a dilatation, after attaining a definite size, suddenly increases at one spot, so as to give the tumour the appearance of one swelling above another, it is usually called a *mixed false* aneurism; and in this the opening into the second pouch is either by absorption of the inner coats or by rupture. The inner coat has been said to protrude between the other two, and to form a sac of an aneurism, called *mixed internal*. Of this a dubious specimen has been reported to have been observed in Paris: but experiments, so far as they go, are against it. When an artery, however, has been wounded, the cicatrix is apt to dilate and constitute a kind of true aneurism. Of this our author believes that he once saw an instance, in an officer whose carotid artery at its bifurcation was injured by an arrow in India.

When aneurism is the result of an accidental affection, and the tumour has increased to some magnitude, the external coat is ruptured at an early period, and does not usually form the sac. This is produced by the blood effused, and the consolidation of the neighbouring parts. It is called a *spurious external circumscribed* or *diffused* aneurism, as the case may be. On examination, the ruptured part of the artery is readily distinguished, and a portion of the artery is usually deficient, for nearly, if not the whole of its circumference. The vessel is commonly affected with the atheromatous or steatomatous patches above and below the immediate seat of the aneurism. When an artery is wounded, and the external opening in the integuments closes so as to prevent the blood flowing through it, a *traumatic spurious external circumscribed* or *diffused* aneurism results according to the facility which the neighbouring parts offer for the confinement or diffusion of the extravasated blood. Thus, traumatic aneurism differs materially from the spurious, in the circumstance of the coats being sound in the former and unsound in the latter. Mr. Shekelton has described in the Dublin Hospital Reports another species, closely resembling what has been denominated the *dissecting* aneurism. The blood forced its way through the middle and inner coats, and dissected the middle from the outer for the space of four inches, when it again forced its way into the canal of the artery, through the middle and inner coats.

We have given the foregoing nomenclature without note or comment so far, but here we must pause and protest that it forms a crabbed and almost unintelligible jargon, instead of a simple and scientific system of names. A traumatic spurious external diffused aneurism! Why, good heavens! it reminds one only of those concise pieces of description to be found in the classics of the nursery! Mr. Guthrie, of course, is not to blame, for he has not ventured to coin these villainous hard words, but merely offered them

as current terms ;—indeed, we suspect that he feels no greater relish for their use than we do. To the mode in which *true* and *false* aneurism are employed we have already objected, and therefore need say no more on that point. The *spurious* aneurism we would abandon altogether, as it does not differ one jot from ordinary aneurism. *Circumscribed* and *diffused* are useful distinctions ; *external* is unnecessary, cumbrous, and bad, as the particular affection is always expressed by the name of the vessel affected. *Traumatic* aneurism is a proper expression, an indispensable distinction ; and circumscribed or diffused are also indispensable epithets to be added to it. To conclude then, we advocate simplification as far as possible, and we must repeat that the present nomenclature, correctly and properly stated by Mr. Guthrie, is vicious, laboured, and clumsy.

After a short notice of the causes of aneurism, Mr. G. enumerates the different modes in which a *spontaneous cure* of the disease may take place. They are supposed, as our readers well know, to be three ; viz.—1. By coagulation of the contents of the sac. 2. By sloughing. 3. By an accidental pressure of the sac upon the artery. With regard to the first, our author observes that nature adopts two means to favor it : the enlargement of the collateral branches, and an attempt to close or shut up the lower openings into the aneurism or those most distant from the heart. On the latter point Mr. Guthrie mentions some interesting facts. In a case of inguinal aneurism where Mr. White operated below the tumour, the canal of the artery in that situation was found contracted to one fourth its natural size. The sac sloughed, and the man died.

In the Hunterian collection are several instances of all the openings into an aneurism, except the upper one, having been closed during life. These preparations show also that when the lower end of the artery has been obliterated the aneurism has not ceased to increase. Such a step, when once accomplished, or even begun, undoubtedly favours the coagulation of the blood, at least under certain circumstances ; but to institute a comparison between it and ligature of the vessel above the tumour, is chimerical and absurd in the highest degree. The preparations, No. 386, 392, and 397, are sufficient evidence on this subject, not to mention the many cases to be found in authors.

* Nothing is more simple than to say that the blood coagulates in layers, or as a whole, until the sac is filled with it ; when nature considers it as an extraneous substance, and employs the absorbents for its removal until the artery is rendered an impervious ligamentous cord, having attached to it a small hard fleshy tumour, which was the aneurism. It is more difficult to explain why this does not always take place, than why it should occur in particular instances. In these cases of spontaneous cure, accompanied by obliteration of the artery, in which dissection has enabled us to ascertain the state of parts, it has always been found that the coagulum of blood was continued into the upper portion of the artery. It is possible, that nature having in some instances closed the lower opening of an aneurism, endeavours to do the same with that nearest the heart. It is perhaps this effort which gives rise to the formation of the coagulum which fills the tumour ; an effort which must always be opposed by the impetus of the blood, unless the coats of the artery take on that higher degree of inflammatory action which leads to effusion on the inner membrane, and the establishment of a power capable of resisting the force of the blood, when the spontaneous cure would be effected. It is very likely then, that the spontaneous

of the blood in an aneurismal tumour is accompanied by a change in the action going on, either in the artery or in the walls of the sac, or in both." 94.

Mr. Guthrie doubts the reported influence of one aneurism in assisting the cure of another below it, and refers to cases and preparations in disproof of it. In illustration of the cure of aneurism by *sloughing* of the sac, Mr. G. relates the case that occurred to Mr. Albert in the York Hospital. The tumour, which was of large size and extended below and above Poupart's ligament, sloughed entirely out, and gave issue to several pounds of coagulum, after which granulations sprang up, and the sore ultimately healed. In two other cases the patients died, worn out by the discharge and extension of the ulceration to the hip-joint. The operation, says our able author emphatically, should never be had recourse to after mortification has begun. Mr. Guthrie is not satisfied of the accuracy of the opinion regarding the cure of aneurism, by the pressure of the sac on the artery above. Neighbouring vessels have been obliterated in this way, but Mr. G. has never seen such a method of cure, nor, as far as he knows, has it ever been proved by dissection. Mr. Guthrie relates a case with the view of shewing that dilatations of arteries may subside. He is not exactly convinced by the details, nor are we, and we therefore pass it without further mention.

On the symptoms and diagnosis of aneurism, Mr. Guthrie has little novelty to offer, nor is it rational to expect any. To one point, however, we may advantageously direct the attention of our readers. An abscess may form between the skin and the sac, and give rise, if not early opened, to external inflammation and ulceration. The danger of these cases, which are fortunately rare, consists in the sac being usually opened by the ulcerative process. Breschet, in the notes to his translation of Hodgson relates a remarkable case. A child, æt. 10, was affected with several abscesses after an attack of fever. Then a tumour appeared on the anterior and superior part of the thorax, which had all the characters of abscess, and was punctured as such. A jet of blood followed and continued till the humour was emptied, when an irritating injection was thrown into the sac. The hæmorrhage was not arrested, the tumour began to pulsate, and in two or three days the little patient died. On dissection, the tumour was found to consist of two parts, one exterior to the sternum and the other within it, the two communicating through an opening in the bone, which was altered greatly in structure and crumbled away on being touched. At the bottom of the internal cavity, the anterior surface of the aorta was seen, the tumour lying upon it. It was not in the least dilated, but on the anterior part of the arch near the innominate was a small perforation one line and a half long, and one wide. We should think, with Mr. Guthrie, that the opening into the artery was a secondary process.

Warner relates a curious case of pulsating tumour between the two portions of a fractured sternum. It had most of the usual characters of aneurism, but being left to take its course, it burst in three weeks, and discharged a considerable quantity of matter, after which the patient did well. Surgeons should recollect that arteries may occasionally take unusual courses, and so communicate pulsation to abscesses or tumours remote from their common situation. Lumbar or psoas abscess may, under certain circumstances, simulate aneurisms. If, however, the patient be placed in the

recumbent posture the tumour is diminished or removed, when the course of the artery is more readily and accurately examined.

The *medical treatment* of aneurism comes next upon the tapis, but as Mr. Guthrie's sentiments on this occasion do not differ from those of all modern well-informed practitioners, we need not stop to examine them in detail.

The section on the COLLATERAL CIRCULATION deserves and must obtain more particular notice. Mr. Guthrie advances propositions, which, however startling they may appear to some, we believe to be worthy of the most deliberate and careful investigation. Until within the last thirty years the powers of the collateral circulation were undervalued, indeed unknown. The scepticism and ignorance of the older surgeons were fostered and nourished, if not originally created, by their own injurious and clumsy operations. Their modes of including in one knot vein, artery, nerves, or whatever was in their way, were the surest means of producing the mortification which they dreaded. Mr. Guthrie, however, judiciously observes, that more modern surgeons may perhaps have run into an opposite extreme, and exchanged the doubts and fears of their forefathers for an overweening and dangerous confidence. In plain terms, they have looked at the collateral circulation through the magnifying glass of modern innovation, and run riot in their presumption on the powers of nature. In all cases, says our eloquent author, in which the circulation is not fully re-established at once, there is a period of doubt, in which a sort of contest is carried on by Nature for the life of the limb, in which she is sometimes successful, often the reverse.

The collateral circulation is more perfect and powerful during the increase and growth of the body, than either at maturity or the decline of life. This observation has been founded on experience, and is readily explicable by theory; but it must also be remembered, that the nature of the disease or injury, and the period that has elapsed between the operation and the infliction of one or commencement of the other, are circumstances that exert a commanding influence. On dissection of persons on whom the operation for aneurism has been successfully performed, we find that arteries known to exist previously have become very much enlarged, and that others not perceptible in the sound limb have been developed in a similar manner. The question is *when* do these vessels begin to assume their unusual size? in other words, *when* does the establishment of the collateral circulation commence?

There are evidently two kinds of communication between arteries:—the first by direct branches of a certain size, as between the palmar and plantar arteries; the second by the inosculations of the capillary vessels. When a vessel under circumstances of the former description is wounded, red blood flows from each cut end; when under the latter, the blood from the lower orifice is dark-coloured and venous. This proves, in Mr. G.'s opinion, that the collateral circulation is carried on in the first instance, by blood drawn in part from the veins as well as the arteries.

"If a limb be injected and dissected most carefully, four or five days after a ligature has been placed high up on the principal trunk, the capillary vessels will be seen to be well injected; but few or none will be found large enough to admit of the inosculation being traced throughout. If another limb be injected and dissected, forty days after the ligature

had been applied, (and these experiments have been made on animals, and opportunities have occurred of making similar dissections on man) a difference will be distinctly observed between the two preparations. In the latter, the capillaries will not appear to be so fully injected, but several larger and more tortuous vessels will be found in situations where they were not expected to exist; and the anastomoses of these one with another, and generally by arches, may be traced to their communication with the principal trunk, both above and below the obliterated parts. Let an incision now be made in the nearest previous portion of the lower part of the artery, and red arterial blood will issue from it. The communication has become direct by communicating branches, and the capillaries have returned to their accustomed duties. After the lapse of years, these communicating branches will again appear to have diminished their numbers, one or more will have become predominant, forming large direct canals of communication, and the smaller will have shrunk up, or be no longer discernible. The limb has in fact returned to its natural state." 136.

During the first twenty-four hours after the ligature of a large vessel, the temperature of the limb is always diminished; after that period it is commonly from three to five degrees higher than in the other; and at the end of from eighteen to twenty eight days the temperature is alike in both limbs. These facts, and the great enlargement which small vessels undergo, prove that the collateral circulation is necessary, is absolutely indispensable, to the maintenance of the life of the extremity. We revert then again to our former interrogatory, *when* does it begin to be established?

"Does it commence with the disease, take place during its progress, or only after the operation? I am of opinion, that the collateral branches begin to enlarge shortly after the commencement of the disease, as a part of the curative process which nature endeavors to set up in most instances; the essential points of which are, in an extremity, 1st, the obliteration of the artery above and below the tumour; 2d, the coagulation of the blood within it; 3d, the enlargement of the collateral branches above and below it.

When a limb is lost through mortification, as the consequence of a division or obstruction of the principal artery, it usually takes place after the infliction of a sudden injury, in consequence of the collateral branches not having had time to enlarge.

If the femoral artery be punctured near the groin, and a diffused aneurism form in a few days, extending up to Poupert's ligament; can the operation of placing a ligature on the external iliac be performed on the same principle, or with the same hope of success, as if the case had been one of true aneurism of several weeks or months formation? The answer is in the negative. The present theory of aneurism is not applicable to the case. The surgeon who placed a ligature on the external iliac, would probably lose his patient from mortification, because the collateral branches would not yet have had time to enlarge.

When an aneurismal limb has been injected, on which an operation has not been performed; the collateral vessels have all been found larger and more fully shown than on the opposite side, although not to the same extent as in cases of a similar nature in which the operation had been done.

It is necessary that this enlargement of the collateral branches should take place, because in many cases the artery beyond or below the tumour is obliterated long before any operation is performed. The main supply of blood is already cut off from the extremity, and the operation adds very little to the derangement of the circulation which has already taken place below the tumour.

These facts appear to me to be conclusive: they show that the collateral circulation is not the same, is not in the same stage of preparation, in a limb suffering from a divided artery, as in one in which an aneurism has for some time existed; and they also show

why mortification is more common after wounded arteries than after operations for aneurism." 140.

The practical conclusions deduced by Mr. Guthrie, from these premises are:—that the theory of the operation for ordinary aneurism cannot be applied with safety to aneurism dependent on wounded arteries;* that it is inapplicable to wounded arteries; and that the length of time an aneurism has existed is, *cæteris paribus*, a guarantee of safety as far as the collateral circulation is concerned. Mr. Guthrie remarks that in the upper extremity the collateral vessels are, as a general rule, capable of carrying on circulation under *any* circumstances: but that when the femoral artery is suddenly cut across, mortification is not an uncommon consequence, especially in elderly persons. If the femoral vein be also divided, Mr. Guthrie believes that mortification seldom fails to follow. We have had opportunities of being convinced of the general accuracy of these deductions, and we therefore wish to impress them most earnestly on the minds of students, and of our more experienced brethren.

The section on the Surgical Treatment of Aneurism is interesting in a historical point of view, and no less so because our author boldly and generously vindicates to Mr. Hunter, the claim of having originated by the force of his genius the modern operation for its cure. Mr. Guthrie has shewn that the successors of Anel and the contemporaries of Dessault, made no attempt to deck their brows with the laurels which were won by John Hunter. It was reserved for the jealousy of more modern French surgeons to attribute the Hunterian operation to the celebrated men alluded to; a jealousy which has defeated its own aim, and, to use a coarse expression, more firmly fixed the saddle on the proper steed. We part from this unpleasant subject without regret. It has occasionally happened that the operation for popliteal aneurism has proved unsuccessful, either from the sac being supplied with a duplex femoral artery, or from large collateral vessels having carried sufficient blood into the artery above the sac to prevent the coagulation and absorption of its contents. Such a case happened at St. George's Hospital; amputation was performed, and the patient died. In another instance which lately occurred to Mr. Briggs, a different mode of practice was adopted, and with complete success. The case is short, and requires no abridgment.

"James Mack, carpenter, aged thirty years, in February, 1829, felt pain in the toes and ankle and knee, and afterwards a swelling like a pigeon's egg in the ham, which gave him great pain, particularly at night, and pulsated like his heart. The operation was performed on the 6th of March, by Mr. Briggs. The ligature came away on the 27th, the pulsation in the tumour ceased, and it diminished very much in size. It was only in June he was able to go to his work, when the swelling had entirely disappeared. In September it began to appear again with pulsation, both the swelling and pulsation being soon greater than before. A compress was applied with a bandage on the part and on the leg, which made it worse. He then applied a hard compress, being in fact a narrow roller four inches in length, on the inside of the thigh, just above the knee, and above the inner hamstring muscles, which was firmly retained in that situation night and day. This gave him relief by taking away the pain, which was principally felt in the toes and ankle. This compress he

* This passage is applicable only to the *diffused* aneurism from a recent wound.—*Rev.*

wore for two months, at the end of which time the pulsation had ceased, although the swelling had not entirely subsided. He has gradually improved ever since, although he has still pain in the back of the leg, and on walking he feels the foot, and particularly the great toe, numb and cold. He cannot quite straighten the limb, and walks with a little halt. There is no appearance of the swelling now, one year after the operation." 157.

The description of the effects of a ligature on an artery need not detain us, as we stated Mr. Guthrie's experiments and observations on this head, in our article on wounds and injuries of vessels. To that article we refer our readers. The division of our author's work expressly dedicated to the subject of aneurism closes with a full, and we will add, very masterly consideration of the operation of tying the vessel beyond the tumour. Our own opinions on this subject are before the public, and hitherto we have seen no reason to modify or retract one single iota of them. We should feel great pleasure in putting our readers in possession of Mr. Guthrie's sentiments and reasonings on this subject, if we were not convinced that it has been argued latterly ad nauseam. As journalists, we must consider not only what is good in itself, but what is palatable, for no where is *loupjourn perdriz* more sickening than in periodical literature. When a question has been worn nearly threadbare, the best way is to put it by for a season, to let it lie fallow for a year or two, and then it comes out with all the gloss of novelty, and all the productiveness of repose. Anel's operation was forgotten until Hunter's revolutionized surgery. Brasdor and Deschamps had tied arteries beyond the tumour without success, and their operation was quietly slumbering in cobwebs and oblivion, till Sir Astley Cooper revived it, and Mr. Wardrop became its Coryphæus. At some future day our posterity may perchance be astonished to find that in the work of an old and valuable author of the name of Guthrie, the merits of a proceeding are elaborately discussed, that had just been *invented* by a Wardrop yet unborn.

Here we must conclude, and were we used to the language of panegyric, we might add a laboured eulogy on Mr. Guthrie's Work. But we will not attempt what would neither enhance his merits nor our honesty. We have read the work with diligence, and have derived from it information of such a quality, that we hope, please God, to read it yet again. It is not to be supposed that in a volume of 416 pages on such a subject, every page is to teem with novelty, every chapter with a discovery; he must be a very thoughtless unreasonable man who could expect it. But the principles inculcated are sound, the observations judicious and frequently indicative of deep reflection, the research great, the experience ample, the deductions practical and acute. If those be not strong recommendations to a work, we know of none; if this will not suit the profession, we would advise it to purchase the lucubrations of Doctor Haslam, and the practical remarks of Mister Wakley.

VIII.

A CATALOGUE OF THE PREPARATIONS IN THE ANATOMICAL MUSEUM OF GUY'S HOSPITAL. Arranged and Edited, by desire of the Treasurer of the Hospital, and of the Teachers of the Medical and Surgical School, by *Thomas Hodgkin*, M. D. Licentiate of the Royal College of Physicians of London; Demonstrator of Morbid Anatomy, and Curator of the Museum at Guy's Hospital; and Member of various learned Societies. Octavo, London, 1829. Pp. 598.

THAT the study of pathological anatomy, which formerly was somewhat neglected in this country, has of late years much increased, may be inferred from the following sentence in the Introduction of the volume now submitted to our examination.

"The author at one time proposed to take the Morbid Anatomy of Dr. Baillie, as the text-book for the Museum, and to have placed the preparations in accordance with the arrangement adopted in that work; but he very soon abandoned this design, finding the work inadequate to the purpose." *Introd. p. ix.*

This good effect, in common with many others, is in a great measure attributable to the general peace which has happily prevailed during the last fifteen years, and to the free intercourse thereby afforded with the continental schools; in several of which this branch of science has long been cultivated under peculiar advantages, and with proportional zeal and success.

But, as it is a common fault with mankind to pass from one extreme to its opposite, there may, perhaps, be a tendency in some persons to over-rate the value of pathological anatomy, and to relax in their attention to other departments of the healing art, which are, at least, of equal importance. It ought, however, fairly to be admitted that, without an intelligent regard to the phenomena of living action, and to the operation of agents, both salutary and noxious, a mere knowledge of the internal results of disease would be of little avail; although, without that knowledge, medical science would undoubtedly be incomplete.

The advantages derived from this source are not the less certain because they are partly negative and indirect; consisting, either in a clearer illustration of healthy structure and function, or in a more exact definition of the limits of our acquaintance with disease, and of our power of controlling it. From inspecting the bodies of those who die of tetanus, or of hydrophobia, we learn, for example, that the most violent and fatal disorders are not necessarily attended with visible lesion. From observing the ravages of unsubsided inflammation, we are admonished to avoid indecision and delay, during the only period when remedies can be successfully employed; and, from perceiving the incurable nature of some organic diseases, we are instructed to abstain from useless or pernicious interference; and to confine our practice to those measures which tend to husband the strength, or to promote the tranquillity of the system.

Among the more positive benefits resulting from this study, we need

only mention the judicious treatment of continued fever, dictated by a knowledge of the intestinal ulceration, which dissection has proved so often to accompany that disorder, but which, without its aid, might for ages have remained unsuspected; and yet, to this single discovery is probably annexed the gratifying prospect of an extensive preservation of human life.

Admitting, therefore, the importance of pathological anatomy when rightly applied, it is obvious that the private practitioner, engaged in the arduous duties of his profession, has, in general, but limited means for its cultivation; and that, for its effective advancement and diffusion, large hospitals alone furnish adequate materials and opportunities. Without the dexterity and sagacity acquired by experience, without a just method, deliberate and universal inspection, and accurate records, the study is liable to much fallacy and imperfection; and should, therefore, be prosecuted by some at least who, possessing suitable aids and qualifications, are enabled to devote much of their time and attention to its improvement.

Owing to various causes, which it is not necessary here to specify, the peculiar advantages afforded by large hospitals for the augmentation of medical science have not always been rendered so available as could have been wished. In the present day the case is happily otherwise; and, without intending any invidious distinction, it is a matter of just congratulation that, in the school of Guy's Hospital, as well as in several others, this object is now pursued with equal zeal and intelligence.

The merit of establishing the museum of this hospital must, in the first place, be ascribed to its treasurer, Benjamin Harrison, Esq. whose exertions during a long series of years to promote the usefulness of the institution, both as an asylum for the sick, and as a school of medicine, are generally known and appreciated. Under his direction, the ample funds of the hospital permitted the erection, about five years since, of a spacious building, entirely devoted to scientific purposes; comprising a commodious lecture-room, apartments for dissection, and the anatomical museum, of which the descriptive catalogue is now under our consideration.

But, in such an undertaking, the most able director, even with funds and materials at his disposal, could not accomplish much, without the aid of well-qualified agents; and, in this respect, the institution is fortunate in having secured the co-operation of the author of this work; whose character, both professional and personal, stands too high to admit of eulogium.

In presenting a short analysis of Dr. Hodgkin's Catalogue, we shall, as far as possible, avail ourselves of its contents; conceiving that, by exhibiting fair specimens of its materials, and of the manner in which they are proposed, we shall do the fullest justice both to the author, and to the reader.

Respecting the facilities afforded at Guy's Hospital for the cultivation of morbid anatomy, it is observed:—

"Where, as in this hospital, the patients are admitted without reference to individual interest, but by a superiority of claim, founded solely on the greater severity and urgency of their particular cases it follows, as a necessary consequence, that the average of interesting cases must be particularly high. Some idea of the ample field for pathological anatomy presented at Guy's Hospital may be formed, from the following statement of the mortality which has taken place in the institution during the last three years."

From this statement it appears that the annual average of deaths, between the years 1825 and 1828, was 281; and that the number of beds at present devoted to patients amounts to 421.—*Introd. p. iv.* As a proof of the activity with which the museum has latterly been augmented, chiefly by the exertions, or under the direction of the author, we are informed:—

“It is only from this period [namely, within the last four or five years] that the departments of descriptive and comparative anatomy can be said to date their existence. The department of morbid anatomy has, likewise, been greatly enriched, not only by the internal resources of the establishment, but also by the donations of numerous contributors from without. In fact, with the exception of a nucleus of scarcely five hundred preparations, the whole collection, at present amounting to upwards of three thousand specimens, has been formed within the short space of four years.”—*Introd. p. v. vi.*

It ought, not, however, to be concealed that, for the production and preservation of this nucleus, under circumstances far less favourable than those now enjoyed, the institution is chiefly indebted to the industry and ability of its resident medical officer, Richard Stocker, Esq.

Among the principal contributors to the museum, we find, as might naturally have been expected, the present and some of the former physicians, surgeons, and pupils of the hospital, the treasurer, the Royal Veterinary College, and the author himself. A considerable number of specimens has been obtained from the well-known collection of Joshua Brookes, Esq. and some of the most beautiful and splendid have been supplied by the hands of Sir Astley Cooper.

“For the illustration of the structure and diseases of the teeth, the museum possesses the collection of the late Joseph Fox, enriched by many valuable and curious additions from his able successor, Thomas Bell.

The department of casts and models forms too important a feature in the museum to be left unnoticed. In this department, youthful as is the museum, it is, perhaps not too much to say that it yields to none in this country. Its advantageous position in this respect must be attributed to the fortunate circumstance of the treasurer's having attached to the service of the hospital Joseph Towne, an artist who has the signal merit of having both created his art for himself, and arrived at such a proficiency in it, that his works, already very numerous, rival, if not surpass, those of the best and most distinguished masters of Florence and Bologna.

The drawings, and diagrams, although not introduced into the present catalogue, must not be omitted in the enumeration of what has been done at Guy's Hospital to facilitate the communication of pathological knowledge. The spirited and accurate pencil of C. J. Canton, constantly employed in this department for the service of the hospital, by preserving the recent colours and appearances of diseased parts, forms an invaluable supplement to the wet preparations, which, after the most successful efforts, must often fail in retaining any thing beyond the form and texture.”—*Introd. p. vi. vii.*

But all these advantages would have been of little avail, either to the hospital pupil, or to the professional visitor, without a good catalogue. To an intelligent student, in pursuit of knowledge rather than of amusement, nothing can be more unsatisfactory than the common practice of sauntering through a large museum, without an adequate knowledge of its contents. A competent living guide is not always at hand; and, even when procurable, it is often far more convenient to obtain the requisite information from a well-composed manual, by the aid of which any part of the collection may be

inspected at pleasure, and the reflexions of the observer may be pursued without hurry or interruption.

Such, then is the nature of the volume now before us; a volume which is by no means, as the title might seem to import, a mere catalogue or inventory, but of which, in addition to a condensed and perspicuous description of the preparations themselves, nearly a fourth part consists of interesting observations on the several branches of the science; the greater number furnished by the author, and a few derived from other valuable sources. After an historical introduction, from which extracts have already been given, and three useful tables, representing the general appearances observed on the inspection of bodies, the principal organic deviations from the healthy state, and the order of arrangement adopted in the work, the volume consists of three grand divisions, describing the preparations illustrative of healthy, morbid, and comparative anatomy.

The latter part, classified according to the system of Cuvier, contains many beautiful specimens; among others, several subservient to veterinary surgery, and one of the best articulated skeletons of the female elephant to be found in the country: but this part being as yet in its infancy, occupies the smallest space in the catalogue. It is, however, enriched by a manual of directions respecting the collection, preservation, and packing of objects of natural history, abstracted from the official instructions of the professors of the Royal Garden at Paris.

The two principal departments, namely, those of sound and morbid human anatomy, are subdivided into the following sections, which we here sub-join; because, although for different purposes different plans may be required, the arrangement adopted on this occasion appears highly judicious, and may be imitated with advantage in other similar institutions. In both departments these sections occur in the ensuing order.—Bones—soft parts about the bones—vascular or circulatory systems—nervous system and organs of the senses—vocal and respiratory organs—digestive organs—urinary organs—genital organs of the female—genital organs of the male—and utero-gestation. Besides these sections, which are common to both, the first part includes a section illustrative of the fluids, and another of miscellaneous objects; while the second part adds a section of diseases of the peritoneum, another of parasitical animals, and a third of models and casts. To each of these divisions are prefixed, as has been already noticed, introductory remarks, tending to fix the attention of the reader on the most important points, and to prepare him for inspecting with advantage the various objects presented to his observation.

Concerning the form in which the catalogue is ultimately disposed, the following explanation is given by the author.

“In printing the catalogue, the tabular form has been chosen as the most convenient for reference, and at the same time, the most concise and intelligible. In the first column is placed the number which refers to the preparation. In the next is the description of the preparation. This, though in general necessarily short, is sufficient to point out the object which the specimen is designed to illustrate. When the preparation is of more than usual interest, the description is given at greater length. The next column contains a reference to the fuller details of the case. The greater number of these references are made to the manuscript histories of the hospital cases and inspections, of which there are now thirteen volumes, most of which have been collected in the course of the last three years.

In the same column are placed references to printed books, when the preparations have been described or alluded to in published works. When the preparation has been acquired as a gift, reference is made in this column to the donor's account of the case, if such a document accompanied the preparation. The last column shows the course whence the preparation was derived, and records the names of those whose liberality has enriched the collection."—*Int. p. xiv. xv.*

That portion of the catalogue which is devoted to healthy anatomy is not only useful in itself, but also eminently conducive to the study of the larger section of morbid anatomy which immediately follows, or rather the two branches mutually illustrate each other; since the knowledge, both of structure and of function, is best promoted by alternately viewing them in their natural state, and in all their various modes of irregularity and aberration. Among the original dissertations inserted in this part of the work, is a copious extract from an unpublished memoir on the anatomy of the brain, presented to the French Academy of Sciences by Dr. Foville, of Rouen, who, with peculiar opportunities of research, has for some years past directed his attention to this difficult and interesting subject. Besides, quotations from Dr. Hodgkin's inaugural dissertation on absorption, at Edinburgh, in 1823, and from his earlier treatise on the use of the spleen, the remainder of the introductory remarks are chiefly derived from observations made by the author, and J. J. Lister, Esq. with the aid of an achromatic compound microscope of superior power, on the component particles of the animal solids and fluids. In reference to the solids, it hence results that their ultimate texture, instead of being globular, as has hitherto been supposed, is either irregularly granular, as in the brain and in some parenchymatous parts, or fibrous, as in most other cases.

In the description given by our authors of the particles of the blood, the reports of former observers are, in like manner considerably modified, as will appear from the following extracts.

"We have viewed the particles, both wet and dry, both as opaque, and as transparent objects, under every variety of power and light; and we lay no stress on observations which have not been confirmed by frequent repetition. To us the particles of human blood appear to consist of circular, flattened, transparent cakes, which, when seen singly, appear to be nearly, or quite, colourless. Their edges are rounded; and, being the thickest part, occasion a depression in the middle, which exists on both surfaces. * * * The concavity of the disks is, however, extremely trifling; and, under particular circumstances, in a few of the particles, the surface is to all appearance quite flat. Notwithstanding the great uniformity in the size of the particles of the blood, so long as they retain unimpaired the form which they possess on escaping from the body, their real magnitude has been so variously estimated that we judged it worth while to attempt a new measurement. In doing so, we adopted a method somewhat different from those hitherto employed. A camera lucida is adapted to the eye-piece of the microscope in such a manner that, the distance of the paper being ascertained, the object may be drawn on a known scale. Tracings of several of the images being made, they were applied to, and compared with, the images of other particles, until their accuracy was established. The diameter of the particles obtained in this manner may be correctly stated at the three-thousandth part of an inch. * * * The thickness of the particles, which is, perhaps, not so uniform as the diameter of the disks, is, on an average, to this latter dimension as 1 to 4.5." * * * The particles of pus "appear to be as irregular in size and figure as those observed in the brain, and bear no resemblance to those of the blood." * * *

particles of milk "appear to be perfect globules; but, far from being uniform, they present the most remarkable varieties in respect to size. Whilst some are more than double, others are not a tenth part of the size of the particles of the blood, to which they bear no resemblance."—*Observ. on Sec. XI. of Part I.*

Until these observations have been repeated by others, they scarcely fall within the province of critical decision; yet it must be admitted that they have been made under favourable circumstances, and apparently with much care and dexterity, by observers well acquainted with the labours of their predecessors, and well disposed to afford each other correction and assistance.

The larger and more important part of the museum, which occupies the second and principal place in the catalogue, is, like the first, divided into sections, corresponding to the various systems of the body; for which the author acknowledges himself considerably indebted to the excellent anatomical work of Professor Meckel, and for the adoption of which he gives the following satisfactory reason.

"The habit of frequently reviewing, in the same succession, preparations brought together for the purpose of illustrating the pathology of a particular organ, or apparatus, cannot fail to render considerable practical assistance to diagnosis, by enabling the memory rapidly to bring under review the various possible alterations with which the organs suspected of disease may be affected; and, whilst we make the choice of that to which the united symptoms appear most decidedly to point, we may avoid the danger of overlooking the right one through inadvertence or forgetfulness. For this reason, it has been thought better to arrange the specimens in the museum under the heads of particular systems, or apparatus, rather than under those of the elementary tissues."—*Introd. p. x.*

To give the reader an adequate notion of a collection of morbid anatomy comprising more than three thousand preparations would, of course, be a vain undertaking; nevertheless, some of its more remarkable contents may be briefly noticed. Among diseased bones, we find two instances of the processus dentatus so much enlarged as, by its pressure, to have occasioned paralysis;—examples of a singular spongy degeneration of the cranial bones;—several cases of fungoid disease; a fracture of the neck of the humerus, with dislocation of the head of the bone;—and a complete ankylosis of the lower jaw. Among morbid appendages of bones, are observed fatty degenerations of muscles; and that remarkable inflammation of synovial membranes which occasions absorption of the articular cartilages. The diseases of the vascular system include rare specimens of scrofulous tubercles, true scirrhus, and fungoid tumours, imbedded in the substance of the heart;—also, several examples of retroversion of the aortic valves; a derangement of structure which, with the exception of a slight incidental notice by Bertin, seems to have been first described by Dr. Hodgkin. The section devoted to diseases of the digestive organs contains some good specimens of that ulceration of the mucous glands of the intestines, which, of late years, has so often been observed to attend continued fever. It also presents examples of malignant disease in the stomach and œsophagus;—fungoid and melanotic tubercles in the liver;—deficiency of the gall-bladder;—uncommon degenerations of the pancreas and spleen;—and, as a matter of curiosity, the stomach of John Cuming, who died, in Guy's Hospital, ten years after having swallowed a considerable number of knives, most of which he retained till the time of his death.

"Amongst the preparations of diseased kidneys, none will be viewed with more interest than those which illustrate the valuable observations of Dr. Bright, respecting that remarkable, though previously undescribed, mottling degeneration of these organs, which he has shewn to be frequently, though by no means invariably, accompanied by a disposition to dropsical effusion," but which is always attended with an "albuminous condition of the urine, as shewn by the application of heat. * * * This degeneration appears more particularly to affect the cortical part."—*Obs. on Sect. VII of Part II.*

There are, likewise, several examples of malignant disease of the kidneys and bladder; cases of congenital deficiency of the anterior part of the bladder; and a large collection of urinary calculi, arranged according to the method of Dr. Prout.

Omitting, for the sake of brevity, the diseases of the sexual organs, we arrive at those of the peritoneum, concerning which the author justly remarks:—

"The subject of hernia is the most important and peculiar which belongs to the morbid anatomy of the peritoneum. Although the museum does not at present possess a very considerable number of preparations relating to this subject, the student will, nevertheless, find that they illustrate some of the most curious and important points connected with it: and he is particularly invited to examine them, in conjunction with the splendid and valuable work of Sir Astley Cooper, now greatly enriched by its editor, C. Aston Key."—*Obs. on Sect. X. of Part II.*

Under the head of morbid utero-gestation, are some remarkable instances of real or supposed hermaphrodites. Respecting malformation in general, it is well observed by Dr. Hodgkin,—

"The subject of malformation and monstrosity is one of the most interesting to which the attention of the physiologist can be directed. Cases of monstrosity may be regarded as invaluable experiments, conducted for us by Nature herself, by which she seems to give us a little insight into some of the laws which appear to regulate the formation and development of animal beings."—*Obs. on Sect. XI. of Part II.*

Although the author does not undertake to transfer to this branch of the work the substance of his Lectures on Pathological Anatomy, he has enriched it as well as the former, with interesting observations prefixed to the several sections, and furnishing a useful introduction to their contents. The principal of these are on bronchocele, on certain adventitious structures, and on irregular productions in the ovaries, and in other parts.

On the subject of bronchocele reports are collected from almost every quarter of the globe, including some made by the author himself, when travelling among the Alps. He justly concludes that snow-water, abstractedly considered, cannot be the cause of this singular deformity; since it is common where snow is unknown, and rare in some countries where scarcely any other water is procurable. His own conjecture, that it is attributable to water holding in solution certain salts of lime, although, perhaps, an approximation to the fact, is, on similar grounds, liable to doubt; for it would be as difficult to prove such an impregnation among the granite rocks where the disease so frequently abounds, as to find a case of goitre in various districts where the waters are decidedly calcareous. A still later observer, Mr. Thomas Colbeck, plausibly endeavours to trace the disease to the use

of turbid water ; such as, in mountainous countries is, indeed, usually the state of water obtained from snow ; but, admitting the probability that impure water of some kind is the principal cause of bronchocele, the precise nature of the noxious ingredient seems hitherto to have eluded discovery.

On the very curious subject of the irregular formation in the ovaries, and in other parts, of cysts, containing teeth, fat, hair, &c. the author examines the opinions of several of the most eminent physiologists ; by some of whom these singular aberrations are regarded "as calculated to throw light on phenomena the most obscure, and, at the same time, the most stupendous."—*Observ. on Sec. VIII. of Part II.* To offer a decision on this abstruse point, the narrowness of our limits, as well as the difficulty of the investigation, at present forbids ; and, for similar reasons, we shall merely notice the author's original and ingenious views respecting the production of several adventitious morbid structures, and which are more fully developed in his dissertation, inserted in the *Medico-Chirurgical Transactions*, Vol. XV. We shall only observe, that these views seem to have resulted from the patient and accurate dissection of a great number of cases, and promise to elucidate a very interesting and difficult branch of pathology.

Our analysis of this work must not conclude without again noticing a very important part of the museum ; namely, the collection of models and casts, already comprising nearly three hundred specimens, and forming a most valuable supplement to the original preparations, to which, as being perfect and unchangeable, they are, indeed, often to be preferred. Not confined to the representation of morbid appearances in the dead body, they include, also, that of cutaneous diseases, tumours, ulcers, fractures, and dislocations ; displaying all the characters which these complaints severally present during life excepting only those of danger and disgust. No verbal description, however graphic ; no drawing, however spirited, can equal the exquisite imitation of natural form and colour in these fac-simile copies. By their aid, the student is enabled, in the course of a few hours, and with the utmost personal convenience, to acquire a familiarity with the outward aspect of many remarkable accidents and disorders, of which, without a serious expense of time, labour, and pecuniary resources, he can rarely hope to study the originals. In the department of sound anatomy, several delicate dissections of principal or complicated organs, such as the brain and its nerves, the internal ear, the muscles, tendons, and ligaments of the hand and foot, the gravid uterus and its contents, and the parts concerned in hernia, are thus represented in the most accurate and perspicuous manner. It is pleasing to repeat, what has already been noticed, that many of the best of these imitations have been executed by a native artist, Joseph Towne, Esq. the successful rival of the celebrated modellers of Florence, and Bologna, to whom, for a long time, this ingenious art seemed to be exclusively confined.

We now take leave of the author, with the highest recommendation of his instructive and interesting volume. To the student who has the privilege of visiting the museum of Guy's Hospital it must prove an invaluable guide ; and even to the distant reader it will communicate much useful knowledge in a pleasing and methodical manner. The indefatigable labour and various talent, requisite for preparing and completing this work, can be appreciated by those alone who have engaged in such undertakings. Unlike most

other books, it does not merely suggest opinions, or describe facts, but furnishes an introduction to a vast number of original and important objects, accompanied, for the most part, with that subsidiary information, by means of which they may be inspected with intelligence and advantage. Such a work appears in this country almost for the first time; and, as it has at once attained a high degree of perfection, it may confidently be expected that it will not only promote the progress of pathological anatomy in the school where it originated, but still more extensively, by exciting the honourable emulation of other similar institutions.

IX.

CHOLERA, ITS NATURE, CAUSE, AND TREATMENT; WITH ORIGINAL VIEWS, PHYSIOLOGICAL, PATHOLOGICAL, AND THERAPEUTICAL, IN RELATION TO FEVER, THE ACTION OF POISONS, &c. &c. &c. By *Charles Searle*, Surgeon of the Honourable East India Company's Madras Establishment. Octavo, pp. 256. 1830.

MR. SEARLE, we fear, has been rather injudicious. If he had stated his "original views" without encumbering them with a load of quotations from various works, they might have stood some chance of being read, even if they were not acceded to;—but, at this time of day, to make up a book on cholera principally from works recently published on the subject, interweaving a slight tissue of originality, hardly capable of keeping the texture together, was an unadvised undertaking. We grieve to make these observations at the very beginning of our review of the work, but candour compels us to the declaration. We shall endeavour, however, to drag from the great mass of quotations, constituting the majority of the work, as much as we can of those ORIGINAL VIEWS which form so conspicuous a feature in the title-page.

The volume commences with a general description of cholera, extracted verbatim from the Report of the Madras Medical Board long since published. This, of course, we shall pass. Next are introduced extracts from Mr. Orton's work, bearing on the progression of the symptoms of cholera. These constitute the first chapter. The second contains the "appearances on dissection," "also extracted from Mr. Orton's work, substantiated by quotations from the best authorities." The third chapter brings us in contact with originality—"the case of the author, with circumstances attending the attack." We shall lay this case before our readers.

"The subject of this case, ætat. 34; 12 years in India; of spare make, and delicate state of health. The 16th of October, 1828. For the past week felt tolerably well, though for some days past has been subject, on the slightest exposure, to catarrhal attack. The bowels this morning were healthily relieved, and he felt well during the day, dining at 2 p. m.

off roast mutton with rice, and drinking therewith three glasses of good sound sherry. At 5 p. m. he took as usual a tepid bath, and subsequently spent the evening in a quiet way at a friend's house, at half a mile's distance: where he made an abstemious supper (usually called dinner) of light soup, with a mouthful off the breast of a snipe, and dried toast; and drank a couple of glasses of good sherry.—It having rained hard an hour before, and the weather being damp and cloudy, he returned home in a palankeen.—On going to bed at 11, he felt well, but a little fatigued, which he attributed to want of rest; his usual hour of retiring being nine o'clock: he exposed himself, as it was his customary practice, to aerial influence, whilst he now rubbed himself well with a coarse towel. On this occasion, the windows being open, as was usually the case, and the weather at the same time damp and raw, he distinctly remembers having felt a passing chill, and a thought at the moment came across the mind, that exposure in this way at all times was hardly prudent: but in getting into bed he soon fell asleep, and continued so till about 1 a. m. when he awoke, suffering from a sense of distention and oppression at the præcordia, which, attributing to flatulency, he endeavoured to relieve by sitting up in bed and rubbing the abdomen; but this affording no relief, he got out of bed, with the intention of taking a little brandy and water—when he immediately felt an urgent propensity to stool, and, as the commode was at hand, almost as instantly passed a copious fluid dejection, without the slightest pain or uneasiness, but with no relief to the abdominal oppression. On leaving the commode, he suddenly felt giddy, which went off on assuming the recumbent posture, but left him sighing, the pulse exceedingly weak, the voice subdued and feeble, the extremities cold, and with a remarkable thrilling sensation, or feeling of nervous tremour in every fibre of the body, but more particularly experienced in the extremities: he now took half a wine-glassful of brandy with double the quantity of hot water; although a little wind was expelled from the stomach, it afforded no relief to the præcordial oppression; he, therefore, swallowed 12 drops of oil of peppermint, in a tea spoonful of sugar; but as no relief was experienced, warm flannels were applied to the belly; these felt hot to the part, but afforded no relief; another copious fluid brown dejection was now passed, which was almost immediately succeeded (I believe from assuming the erect position) by vomiting of a small quantity of mucous fluid with the peppermint: presently afterwards a desire was again felt to stool, but being restrained, the stomach appeared immediately to sympathise, and ejected with some force its contents, consisting of about 6 ounces of ropy mucus, enveloping a small quantity of indigested rice, which tasted very sour. The vomiting occasioned a singing noise in the ears, and sense of great exhaustion, with sighing and oppression of breathing, which was only relieved by the unceasing use of the punkah.* Ten minutes afterwards the following draught was taken.

R Ammon. Carbon. gr. x.
 Magnesix ʒj.
 Magnes Sulph. . . ʒij.
 Aquæ ʒiij. M. ft.

This induced an agreeable warmth in the stomach, but no expulsion of flatus, nor did it afford any relief to the præcordial oppression, which continued unabated, although hot flannels had been constantly applied. Another evacuation was now passed, and soon after was again felt, but being uncomplished with, the stomach became again sympathetically excited, and the draught, which had been taken now about a quarter of an hour, was thrown off, much diluted with a flocculent colourless fluid, tasting strong of the ammonia. Vomiting was in this instance attended with a little perspiration, but of very transitory duration; and there was a little relief felt of the præcordial oppression. A few minutes afterwards, a couple of clysters of a solution of salt in warm water were thrown up the bowels, which were succeeded by a copious flocculent mucous fluid evacuation: this afforded slight but sensible relief to the abdominal oppression. Shortly afterwards, on attempting to sit up, faintness came on, followed by vomiting of a mouthful of mucous fluid, singing noise in the ears, and feelings of great exhaustion. The præcordial oppression being still great, the clysters were repeated, and continued at short intervals—as they were generally

succeeded by evacuation, which always afforded more or less relief. As the abdomen felt hot to the hand, and there was some thirst now experienced with desire for cold drink—a wine-glassful of cold water was taken, and repeated every half-hour, with great comfort, and no subsequent vomiting. The warm salt water injections at short intervals, with the cold water for drink, and the constant use of the punkah, were continued from this time, about half-past 3, till 6 o'clock—with progressive relief to the præcordial oppression, which still continued considerable, and with general amendment—when an increase of thirst being experienced, with sense of preternatural heat of the extremities, the clysters were discontinued, and a drachm of Cheltenham salts dissolved in 4 ounces of water, was taken, and the same dose repeated 2 hours afterwards; by which pretty copious, colourless seromucous evacuations were continued to be passed at short intervals, with gradual relief of the præcordial oppression, and comfortable feelings of amendment. At 9, a. m. a cup of tea was taken, but the milk in it soon after becoming sour, occasioned nausea and oppression of stomach, which continued a couple of hours. The heat of skin having progressively increased, at 11 o'clock the following pills were taken, with a claret-glassful of cold water, and the latter was repeated occasionally afterwards, ad libitum.

R. Hydr. Submur.

Pulv. Antimon. ãã gr. ij.

Ext. Coloc. Co... gr. vj. M. ft. Pil. ij.

I must observe, that after 10 o'clock, the evacuations which continued to be passed every half hour or so, became less copious, thicker, and somewhat of a feculent tinge: at 2, they became decidedly bilious, but containing many flocculent shreds. At 10, urine was voided for the first time: at about which time it was noticed by an attendant, how wasted and shrivelled the fingers appeared, and on examination the toes appeared so likewise; the digits of both extremities feeling at the same time inflexible and contracted.—4, p. m. Since 2 o'clock, a little moisture has been felt about the feet and palms of the hands, the feeling having since become proportionately comfortable, and spirits buoyant; there is still a little præcordial oppression experienced, but less thirst; a little appetite, too, is now felt; tongue slightly coated; the pulse, too, has much increased in volume, and diminished in frequency—in the recumbent posture it is 84, sitting up in bed increases it 20 beats in the minute, and giddiness is felt.—8, p. m. Half a cupful of broth was taken at 4 o'clock, but the feelings were, an hour after, that it had better been omitted; an occasional wine-glassful of water only, has therefore since been taken, and which it is the intention to continue throughout the night; the stools are frequent, watery and bilious; præcordial oppression greatly relieved, and feelings generally comfortable.

Repet. Pil.

18th, 6 a. m. The air being calm and oppressive, the attendance of a servant to fan the patient was required throughout the night—by which he rested, and slept for a few hours at intervals, having to get up frequently to stool: the evacuations continue as limpid as water, are green, but contain some mucus and a few flocculent shreds; they are passed without griping, but occasion a good deal of irritation about the anus: feelings comfortable; but on rising feels giddy and weak; pulse soft and weakly; skin a little moist.—Some sago was now taken; and a dose of Cheltenham salts two hours afterwards. From this time the convalescence was rapid, the diet being light, and proportioned to the weak state of the digestive organs." 41.

The narration of this case will probably induce many of our readers to think that it was not one of very great intensity—not more indeed than what might and does often occur in the hot seasons of this and other temperate climates, where people happen to eat two dinners in one day—take a warm-bath before the digestion of the first dinner is completed—and oppose them-

selves to the raw air of a damp night, after the second dinner. We confess that an attentive perusal of this case, would not lead us to any decided idea respecting the cause of the epidemic cholera of India—nor yet to its treatment. The author acknowledges that “the remedies prescribed were dictated more by his feelings than by any preconceived opinion:” and he became convinced that the “præcordial oppression was from the congestive state of the stomach and bowels,” since the stimulants afforded no relief, whereas the evacuations invariably did so, more or less. These evacuations, therefore, he is convinced were the chief objects to be sought in the treatment of cholera.

“Had I, on the contrary, restrained this, by opium and stimulants, which has been too commonly the practice, inflammation would have become developed, with its attending symptoms, burning heat, and extreme irritability of the stomach; restlessness, and so forth; or spasms with their exhausting influence; or the absence of these symptoms, and the non-development of excitement from cerebral congestion.” 42.

Mr. S. thinks there can be no doubt that the disease was true cholera. The sero-mucous evacuations, the suddenness of the invasion, the prostration of strength, taken in conjunction with the state of the weather, leaves, he imagines, no question on this point. We certainly have our doubts respecting the degree of the disease, and consequently respecting the efficacy of the treatment—which was, indeed, little more than combating occasional symptoms or feelings as they occurred.

The fourth chapter is on MALARIA. By this term we mean a mephitic vapour, “the gaseous production of organized bodies in a state of decomposition.”

“Dr. Dwight, an American divine and traveller, has made the nearest approach to the discovery of this subtle agent. When on his travels about the lakes of America, he found that typhus did not prevail round the margin of lakes which were fed by natural springs, and which were bright upon their surface; but on the contrary, it did prevail round the margin of those artificial lakes, which not being thus fed, were not only dull upon their surface, but covered occasionally by a dirty film, which, on experiment he found to be, the putrefactive product of animalculæ, which are existing in vegetable matter. For to this, as a variable agent, the conjoint operation of circumstances or system to its development—thus modifying the result, it is, that we must look to the effects, being in one case fever, and in another cholera.

A high or low temperature of atmosphere may be a modifying circumstance. And elevation of temperature may be a favourable predisposing cause to the result, being cholera, which has been so fatally prevalent of late years in India; but it is not this simply, or the disease would be confined to such latitudes, which is not the case, as I shall adduce a most striking instance of its endemic prevalence, of recent occurrence in this country—at Clapham. It is true, this occurred in the month of August, but at a time when the thermometer was far from ranging high: and it may be further observed, that in places so situated, that is in high latitudes, fevers are of as common occurrence. The same objections obtain as to cold, or humidity, as well as to variety in the electrical condition of the atmosphere.

That malaria, I think it reasonable to suppose, is a variable compound, the consequences resulting—being thus modified. For were the nature of the disease to depend simply on quantity, or intensity of the same influence, we might expect the two diseases in an epidemic visitation of either, prevailing in common; corresponding with the locality or particular circumstance of situation and the like, of the patient, which is not the case. Whereas, corresponding with intensity of influence, and susceptibility to impression, have we se-

verity of grade of disease—whether of cholera or of fever—marking their species or varieties. The connexion, however, between the two diseases is very intimate, for the fact is undoubted, that fever has not unfrequently succeeded, or has been conjointly prevalent with cholera during its epidemic visitations; though for a certainty it has not been of usual or common occurrence.” 47.

There is another modifying circumstance which cannot escape observation—“cuticular capillary torpor, the effect of exposure, and which I believe to have been the immediate cause of my own attack.” He does not, however, consider this state of the cutaneous circulation, whether resulting from simple exposure to cold, or to the influence of morbid exhalations, as essential to the development of cholera. He looks upon it rather as an accessory cause.

“For I believe the true state of the case will be found, that malaria giving rise to fever, in general is of a milder species; hence it is, that after its absorption, and the blood’s contamination, its effects are not manifested in many cases till a distant period, or some accessory agency or exciting cause develops its action.” 48.

In the primary actions of disease, the resemblance, says Mr. S., in all the essential characters between cholera and fever is very striking, and has been observed by various writers—the cholera appearing to many of them to be a protraction of the cold stage of fever. In proof that the disease, whether cholera or fever, may arise from animal exhalations alone, Mr. Searle appeals to a case published in the sixth Number of this Journal (quarterly series) where some men were instantly taken ill on opening a grave near Canton, the disease assuming a typhoid and even pestilential character. The observations of Fourcroy, and the experiments of Gaspard, Magendie, and others, are also adduced in support of this view. Still there is no doubt that it is to vegetable decomposition *chiefly* that we are to look for the agent which causes fevers, choleras, and very many other diseases.

In the second section of this chapter, Mr. Searle returns to his usual plan—that of extracting passages from the writings of others. Dr. Maeculloch’s work on malaria supplies our author with materials for the doctrine that cholera is produced from the invisible agent in question, and these materials are supported and augmented by various reports to the medical boards of the different presidencies of India. The author then copies from the *MEDICAL GAZETTE*, the account of the fatal cholera at Clapham, caused apparently by the opening of a very foul drain in the back of the house where the disease occurred. These cases certainly support, in a very strong manner, the opinion, that cholera is the result of morbid exhalations from the earth.

“With the foregoing direct evidence I may venture to terminate the enquiry, and assume it as a fact, beyond controversy, that malaria is the cause of cholera, of the species we have now under consideration, which I beg to denominate congestive, as appearing to me the most appropriate with the general phenomena presented by the disease to our notice—in conformity with appearances on dissection—and as pointing out to us the most successful indications of practice to be pursued.

Since the above was put into the hands of the printer, a fact has been brought to my notice which I cannot resist mentioning; as it points out a source of the malaria kind, which would be little suspected. During the winter assizes at Hertford, four years ago, a boar-skin, which had a very offensive smell, having been introduced in evidence to the

Court, many of the members, and other persons present on the occasion, were seized during the same night with cholera. The lady who related to me the circumstance, assured me, that three of the Council, who took up their abode in her house, were all of them attacked between the evening and the following morning, and were exceedingly ill. The medical gentleman who attended them, investigated the circumstances at the time, and declared this to have been the cause of their seizure; and which, we may add, is extremely probable." 69.

We now come to the fifth chapter. Mr. Searle, as an Indian practitioner, cannot be supposed as addicted to the art of book-making; yet, since the publication of Thornton's "PHILOSOPHY OF MEDICINE," we have never seen such pains taken to captivate the reader by a splendid display of "CONTENTS" at the head of each chapter or section; followed by such slender materials for satisfying the literary appetite so excited.

We regret to say that the two sections into which this fifth chapter is divided, have not produced that effect which they were evidently, expected to do on the reader. "The chemical qualities of malaria—the effects of noxious gases on the system—the post-mortem appearances—the textures or parts on which malaria primarily operates—the source, nature, and distribution of the nervous energy—the action of the venom of the serpent—the primary operation of the febrile cause—its mode of action in producing synochal fever, &c." are little more than a tythe of the subject discussed in eleven pages of large type—and that generally by extracts from various writers! To attempt to give any thing like a connected view of such heterogeneous materials, would defy much abler pens than we pretend to wield. We must, in this instance, imitate our *legerdemain* brethren (the *short-hand writers*, as defined by one of Mr. Wakley's witnesses) when they tell us that the speeches of certain members were "*quite inaudible*," but *understood* to be as follows:—the noxious influence of malaria is induced by the blood's contamination, which operates by "torpifying or arresting the chemical functions which take place in the general capillaries of the system, by which there is a diminished evolution of caloric and electricity, and, in consequence, debility of all the functions." This is supposed to take place in the same way as when the venom of the serpent and various other sedative poisons, animal and vegetable, are introduced into the system. For the arguments and illustrations in support of this position (the sum and substance of the fifth chapter) we must refer the curious inquirer to the work itself.

The four succeeding chapters, which are all theoretical, and very unsatisfactory, we shall pass over. The ninth chapter is thus headed. "Detailed treatment of Cholera in all its stages, and different varieties; written in a style adapted for non-professional readers, for the advantages of those more particularly, who are beyond the sphere of medical assistance."

It is certainly rather curious that the author should, all at once, descend from the most refined and erudite speculations on the nature and cause of cholera, to a non-professional code of instructions as to its treatment. By this transition, however, the author has gained one important advantage—that of becoming comprehensible. We shall allow him to speak for himself.

"The patient, on the first symptoms of affection, to be confined to the recumbent posture, in short be laid in bed, between a pair of warm blankets, in an open airy room—when, should there be symptoms of indigestion, or the stomach appear oppressed, it will be advisable to evacuate it, by the patient either drinking plentifully of warm water, or by what is better—a mustard emetic, which operates as a powerful and general stimulant on the

system; two table spoonful of the flour of mustard, or the same quantity of the powder, of the common black mustard seed, (which is to be procured in every bazaar in India, and which I found to be decidedly more active than the Europe flour) given in half a pint of pretty warm water, operates effectually in a few minutes,* without inducing any subsequent feelings of exhaustion; on the contrary, the eyes sparkle, and a genial glow of warmth succeeds throughout the system, with proportionate increased vigour of the circulation.

After the operation of this, rather preparative measure—to the stomach's being placed in the best condition, to be acted upon by our remedies more particularly curative,—and in furtherance of the same, a warm clyster should be administered, consisting of a dessert spoonful of table-salt dissolved in a pint of warm water, and a spoonful of common, or castor oil; and the same should be repeated every half hour, or oftener—for by thus keeping the bowels excited, tranquillity of the stomach is insured, and the consequent retention of our remedies—the chief of which is calomel; but as this requires some time before it can be received into the system, and effect its operation—as the absorbing power of the stomach, or susceptibility to its influence—in this disease, the distinguishing character of which, being the subduction of all the powers of life—is greatly diminished, it becomes necessary to give it in proportionately large doses, and at the same time, in aid of its operation, and in support of the living powers—to administer occasional cordials. A scruple of calomel in powder should therefore be placed upon the tongue, and the patient gargling his mouth with a little brandy and water, should swallow it; but it must be observed, the quantity of the latter should at no time exceed three table spoonful, which may be in the proportion of one of spirit to two of hot water,—as a bulk of any fluid, in a delicate irritable state of the stomach, is invariably productive of its rejection.

If the case is urgent, the same dose of calomel may be repeated every hour; otherwise, in two hours; or if the patient is much improved, in half the quantity; and thus prolonging the interval, or reducing the quantity—it must be continued, according to the state of the patient, till bilious stools and urine are produced;—the spirit and water, or mulled wine, either; or where the system is very low, thirty drops of (sal volatile) aromatic spirits of ammonia, or of hartshorn in half a wine-glassful of water, may be singly, or alternately administered, every quarter or half hour; with the precaution before given, to avoid oppressing the stomach by undue quantity.

In addition to these means, if the skin is cold, warm flannels should be constantly applied; or if the skin is damp and the patient suffers by cramps in his legs and arms, the parts may be well compressed, and rubbed with the flannels besprinkled with hot salt. We have yet omitted to mention a very important remedy, one capable of producing much good, or no less harm—this is blood-letting—which, if the patient is an European, or native of pretty robust habit, should be early resorted to—if the pulse admits of it, that is, if compared with another person's—it is of pretty moderate strength: the object to be borne in mind by bleeding in this case, is to excite, by removing oppression from the brain and circulation, and not to subdue the action of the heart, that it should be taken from the patient whilst continuing in the recumbent posture,—and here I must insist once for all, that on no account, and for no purpose, is the patient to be permitted to sit up, or leave the recumbent state, or sickness almost immediately takes place; the evacuations should therefore be received in a bed-pan, or cloth; and the blood be taken from a rather small orifice, that, the stream being in consequence small, the system may have time to accommodate itself to the deprivation,—the effect of which, however, should be carefully watched—the operator keeping his finger during the time on the pulse, at the same time encouraging the

* This is an excellent dog medicine, a spoonful operates upon their bowels effectually in a few minutes.

patient by suitable conversation;—when, at the instant it is found to flag, without reference to the quantity withdrawn, whether much or little, the finger should be placed over the orifice; but it must be borne in mind, that fear, nausea, or sickness may occasion this result, that should the quantity taken have been small, after a few minutes—if the pulse recovers its wonted strength, as it is an object to carry it to as great an extent as the circumstances of the patient admit—the finger may be removed from the orifice in the vein, and the blood allowed again to flow, with the precaution before specified; but should, after a further small loss, the same result ensue, it is clear that any additional attempt at this time would be injurious; though it may be afterwards practised, as excitement becomes developed, either in relief of spasms, sense of burning heat in the stomach, or pain in the head, or oppression of breathing; and with the precautions I have given, may be frequently put into practice, and without the possibility of harm—but, on the contrary, with the happiest effect; for in this disease small bleedings in relief of the engorgement of the brain, stomach, and heart, are clearly and most forcibly indicated. (See case A. in the Appendix.) The same intention is partially fulfilled by the clysters, but as warmth and excitement become developed, evinced too by the desire the patient has of cold water—these may be aided, or superseded by a weak and cold solution of Cheltenham or Epsom salts, or of cream of tartar, with which the patient may be now indulged—in the quantity of a wine glassful at a time, instead of the cordials—which would now prove injurious; these will not, however, supersede the calomel, the necessity for which still continues, not only till bilious stools are procured, but even then, though in smaller doses, till healthy evacuations follow. It may however now, on febrile symptoms taking place, be well to combine it, with an equal weight of James's fever, or antimonial powder, and give it, if it is preferred, in the form of pill; but mind if the calomel is thus combined, acids, such as cream of tartar, are not admissible, as an emetic compound would be the result. The calomel and antimonial powder we would now advise, in the proportion of two grains of each, every two hours, with a tea spoonful of Epsom, or Cheltenham salts, in a claret glassful of water with every second dose: and if there is much thirst, the patient may, at the same time, be allowed a wine glassful of barley or cold water every half hour; and the same be continued, till the secretions of bile and urine are restored—when, and not before, may the patient be allowed some sustenance, the best of which will be *light* beef tea, or chicken broth, for it must be remembered, and borne in mind, during the convalescence, that in proportion to the feeble state of the patient, so is the stomach weak and powers of digestion.

Many have an objection to salts; where this is the case, two table spoonful of castor oil may be substituted, or a dose of rhubarb and magnesia when this is preferred. Should the operation of the purgative be attended with much exhaustion, it may be necessary to support the patient with some spiced broth, wine and water, or mulled wine; or it may even be necessary to moderate it if there is much sinking—by a dose, of from twenty to forty drops of laudanum; but this is providing against contingencies, which with moderate care and attention will seldom be found necessary.

The secretions from the bowels are now sometimes so exceedingly acrimonious, that in passing along the line of bowels and from the anus, they produce, from extreme irritation—very considerable exhaustion; when this is the case, it will be advisable to inject an occasional emollient clyster, of starch or thick congee water, with oil; to the first of which may be added a tea spoonful of laudanum, and this repeated if necessary; at the same time hot flannels may be applied to the belly.

In the treatment recommended, we have had in view an ordinary attack of the disease, and coming on with symptoms of indigestion, or stomach derangement; should however the disease, which it not infrequently does, have made an insidious approach, under mask of a simple loose state of the bowels, and from the continuance of which the patient is much exhausted; in a case of this sort it may be necessary to quiet the system, and

arrest further action of the bowels, till a certain degree of excitement of the system, becomes developed; this may be effected, by adding a grain of opium to the first dose of calomel, or an equal proportion (thirty drops) of laudanum, and which it may be necessary to repeat, but it is only under these and the like circumstances that opium can be recommended. — The treatment in other respects becomes the same, save that, in such cases, rhubarb and magnesia, or castor oil is to be preferred to salts, in the stage wherein these are recommended; and that bleeding and clysters can only become necessary, in the relief of the symptoms we have pointed out, when excitement becomes developed; excepting, when there is experienced a sense of oppression and distention about the stomach and bowels, when the clysters may be advisable; otherwise it is to be feared, the stomach will be affected with sickness, which will obviate all our attempts at relief. Should there be burning heat of stomach, while at the same time the body is death-like cold, it will be in vain to attempt resuscitation with stimulants, calomel is the only one admissible,—the stomach being in a state of inflammation, a scruple may be given every hour, and at the same time, as there is a great desire for cold water, and Nature's craving should be respected, a table-spoonful or two may be allowed every five or ten minutes, but not more at a time, as the stomach is in this state very irritable, and were a quart to be given, it would not satisfy the patient, who would desire as much more five minutes afterwards; that this precaution is indispensable. The clysters are also in this case to be continued; and should the sense of heat in the stomach be great, a dozen leeches may be applied over the part, and after their removal a flannel wrung out in warm water may be applied, and with this covering exposed to the air, so as to encourage a little evaporation if grateful to the feelings of the patient; it should however be observed, that the temperature be not too much reduced in this way. If the pulse admits of it, or as general excitement becomes developed, bleeding may be resorted to, particularly if there are spasms, with the precautions I have already enjoined in having recourse to this remedy.

There is another remedy simple in the extreme, always available, and speaking both from personal experience and observation, I may add, of powerful operation, which is the fan or hand punkah—it not only renews the air, but condenses it, and thus aiding the respiratory function, assists in no inconsiderable degree in supporting the actions of life; that I cannot too earnestly recommend its uninterrupted use from the earliest period of attack; it is, at the same time, exceedingly grateful to the patient.” 121.

The foregoing extract, and indeed the whole work will convince Mr Searle's readers that he is not a very practised writer. The composition, in a literary point of view, is very inferior;* but this we should not, in the slightest degree, object to, if the originality of views or importance of practical precept, had answered the expectations which are excited by the author, in the title page, preface, and various parts of the work. We cannot say, however, that a perusal of Mr. Searle's book has given us any additional insight into the *nature or cause of cholera*. His therapeutical indications we have laid before our readers, for, as they are founded on experience or observation, they form by far the most valuable part of the work.†

* Since the above was written we have learnt that the author's health was so bad at the time when the work was printing, that he was unable to superintend the correction of the press.

† Nearly half the work, or at least 100 pages, are dedicated to an appendix, consisting of cases and observations “extracted from the report of the Madras Medical Board.” We

grieve that Mr. Searle had not some friend to advise him in this publication. It is astonishing that his own common sense did not tell him how unlikely it was that such a plan would succeed in these times.

At the end of this Appendix is another, containing an Essay on Vital Temperature and Nervous Energy; which was submitted to the Medical and Physicall Society of Madras—a society which appears to have been dissolved soon after its formation, for want of support. We are sorry to find that the “nervous energy”—or at all events, the professional zeal of our Madras brethren is not equal to that of their more northern countrymen at Calcutta!

Of the original Essay we are unable to take any analytical notice. The following extract will afford a specimen of the author's electrical reasonings.

“The medulla oblongata (from which all the nerves of sense I believe arise) is the organ appropriated to receive the impressions of the senses, and which it communicates to the mind, by the blending of its nervous fibres with those of the cerebral organ, in the medullary portion of the latter. It is very clear that the senses are united in function, as they are only thus conjointly under the power of volition, as a proof, I cannot will to see, without both hearing and smelling, nor have I the power to arrest the function of either singly, but the whole I can simultaneously, by going to sleep; and thus it is that the muscular nerves of the organs of sense arise also from the medulla, as they are united in effect; and hence also it is, that the medulla oblongata is formed, by the union of the *crura cerebri et cerebelli*, or at least, that they enter very largely into its composition, thus blending the animal functions or voluntary, with the mental in this organ, as they are conjointly in operation.

The state of being awake, or alive to all the impressions of sense, I am of opinion is that, in which the current of electricity passes through or is extended to the medulla oblongata, and thus are the senses and all the functions in a state of excitement; whereas, in sleep, the stream of electricity takes a different channel, or perhaps wholly passes off by the 8th pair, which, it will be remembered, arise from the inferior medulla; hence it is that digestion and the secretive processes are much more active during the state of sleep, and that dreams, we may infer, are occasioned by the excitement of the intellectual organ; by the 8th pair not withdrawing a quantity of electricity equal to the supply; meaning of course, the quantity over and above what is required for the excitement of the respiratory muscles, which are at all times in operation; and, as their action is voluntary, it is very clear the organ of volition can never be at rest, like that of the mind and senses; and hence it is that we often turn over and move unconsciously during sleep; and this consideration affords some insight into the state of somnambulism. Finally, the spinal marrow appended to and surmounted by the cerebellum, are organs appropriated to volition, and the numerous functions more particularly characterizing animal existence.

In conclusion it may be observed, that the scale of animal life comprises three conditions of existence. First—the organic, or that going on in the capillary system, or structure analogous; this, bordering on vegetable life; and the latter on chemical affinity; rendering the last, the bond of union between organic and inanimate nature.

Second—the nervous and sentient, dependent on the first—or the more particularly animal, connected with organs of sense and volition.

The third and last surmounting the whole, the intellectual; on the summit of which, man stands proudly pre-eminent, with a brain or cerebral organ, developed in a ratio with his vast comprehension, and superiority of mind, above the rest of the Almighty's creation; and holding communion with an immortal spirit, in a way inconceivable to the limited number of faculties, with which, it has been the pleasure of the Almighty to endow him.”

X.

OBSERVATIONS ON THE STRUCTURE AND DISEASES OF THE TESTIS. By *Sir Astley Cooper*, Bart. F.R.S. Serjeant-Surgeon to the King, Consulting Surgeon to Guy's Hospital, &c. &c. Quarto, pp. 245 ; 22 Plates. Longman's, London, 1830.

THE medical reviewer has oftentimes a pleasing, but oftener an unpalatable task. The number of good books which issue from the press bear a woefully small proportion to the bad and the indifferent ; but the honest critic must wade through all, and expend his time and labour upon many. This is mere drudgery, and of drudgery we do not complain, for it is our business to undergo it. But it is a curious and by no means an inexplicable fact, that the worse the book the more importunate and exorbitant in his expectations is the author, and many "a puddle in a storm" is it our fate to witness and our task to appease. An able author is altogether a different personage to deal with. He is strong and he knows it ; having nothing to dread from criticism or the critic, he neither annoys the one nor is galled and nettled by the other. In short, as a real gentleman invariably gives less trouble than a would-be one, so the author of a valuable work is infinitely more tractable than the writer of a volume of trash. We believe we have contrived to give as little offence as any of our editorial confrères ; but God knows we stand upon ticklish ground, and, like the Roman legions in the Caudine forks, a single faux-pas sends us under the yoke of an irritable author's ire.

These reflections were naturally excited by the contemplation of the magnificent volume before us. In a preface, displaying the modesty which real merit always wears, Sir Astley Cooper observes, that they who are aware of the expenses of such works, require not to be told that his object in publishing cannot be pecuniary advantage. Having been placed for forty years in a situation of ample opportunity—having been fostered by the profession and the public infinitely beyond his deserts—he feels that he is only performing his duty in giving to his medical brethren, without any sordid views, the result of his experience. How plain, and manly, and noble a sentiment ! How honourable to the veteran who has fought, we may say, the battles of science for nearly half a century, to dedicate his trophies to the Commonwealth, and expend his latter years in bestowing information and conferring benefits on those who shall come after him. None can fail to be struck by the contrast between such a man and the fry of small authors, whose flip-pant étourderies too frequently disgrace the medical periodical press. A contributor of a false fact to the most obscure journal, would make more pother and raise more dust with his stupid egotism, than all the distinguished authors of ancient or modern times put together.

The present work on the diseases of the testis is divided into two parts. The first is occupied by a copious, and in many respects novel, description of the anatomy of the healthy organ—in the second, its diseases are treated of at large. We intend to give a full, yet, we trust, succinct account of all the contents of this splendid volume, but we cannot pursue the order of the

able author. We shall, therefore commence with the diseases of the testis, and conclude with its anatomy, by which means we shall place the practical details in the hands of our remote and less affluent brethren, at an earlier period than if we adopted a different arrangement. Perhaps even this slight alteration may prove the means of benefit to individuals affected with these maladies, nay, spare them the horrors and the dangers of an unnecessary operation.

In looking at some classes of diseases, the present generation have much reason to be proud of the advances which zeal, industry, observation, and talent have effected. We might instance many, but shall here content ourselves with those more immediately under consideration. It is not twenty, no, nor ten years since, that the chronic inflammation of the testicle was looked upon with awe as a "sarcocele," and many a testicle was extirpated then, which is now preserved by the timely and judicious exhibition of mercury. Surely nothing can afford more pleasure to an ingenious and humane mind, than the thought that numbers of individuals are no longer submitted to pangs and maimings which were daily inflicted by our ancestors. In a pathological point of view, we have witnessed equal improvement in the discrimination of the various organic changes to which the testicle is subject; and although it may not be now of such service to distinguish scirrhus of the gland from fungus hæmatodes, yet accuracy of diagnosis is never attended with any evils, and may be followed by important consequences. Of the labourers in this vineyard, we must rank Sir Astley Cooper, not among the foremost, but the very first. His former publication, on the diseases of the breast, and his present volume, will probably confer more benefit on practical surgery than any contemporary writings. This is no compliment, it is truth from the mouths of those who have nothing to gain by flattery, nothing to lose by disapprobation.

In the illustrations of the complaints of the breast before referred to, Sir Astley treated only of the non-malignant. He has delayed the second part, containing an account of the malignant, because there are some points on which he is not yet fully satisfied. The present observations on the testicle will be found in part in his published lectures,* but much has been added, and the plates are, of course, altogether new. The morbid preparations, illustrating the able Baronet's descriptions, are placed in the museum of St. Thomas's Hospital, and in excellent preservation they remain. With these observations and explanations we proceed to work, we mean to analysis. No pains shall be spared to render this as close as possible, and place the substance of a three-guinea volume before the readers of this Journal. This diffusion of his opinions will give more pleasure to Sir Astley Cooper, than the sordid gain which the sale of thousands of copies could afford. The first chapter consists of—

GENERAL OBSERVATIONS ON THE DISEASES OF THE TESTIS.

Sir Astley divides the diseases of the testis, like those of the breast, first

* By Tyrrell. By the way, when is the fourth volume to appear? There is a wonderfully long interval between the births.

into those which result from common inflammation, acute or chronic ;—secondly, into the specific but non-malignant, the action differing from common inflammation ;—thirdly, into the specific and malignant.

The acute inflammation after having spent its force retires, and leaves but little alteration in the part ; it sometimes terminates by abscess which forms with rapidity, but discharges itself slowly by ulceration. The chronic inflammation is slow in the adhesive, suppurative, and ulcerative stages, and it produces sinuses and exuberant granulations, which are difficult of cure and require a peculiar management. The specific but not malignant diseases seldom proceed to suppuration. Some of them lead to the necessity of extirpation, as the hydatid disease ; but others, as the mumps, the scrofulous, and perhaps the venereal disorder of the testicle yield to the action of medicine. The malignant diseases are the fungous and scirrhus, the latter, in Sir Astley's opinion, a very rare affection.

The diseases of the testicle are either local only, or "constitutionally local ; and the constitution may be also secondarily affected by the local irritation. Acute inflammation, however arising, is a local disorder, or, if the constitution be implicated, it is secondarily. Chronic inflammation originates in a peculiar state of the constitution as well as in the part, both giving a languid and tardy character to the processes of inflammation. Specific non-malignant diseases may be local only, as the hydatid or encysted ; or they may be constitutional and local, as the scrofulous ; but the products of both are different from those of common inflammation. In malignant diseases the disposition to them is founded on unhealthy changes in the constitution ; but their chief distinction is their property of contaminating structures in contact with them, and invading contiguous parts through the medium of the absorbents ; similar diseases may also exist independently in other parts. If a malignant disease be removed, the wound often heals rapidly as in a healthy person, whilst the disease reappears some time afterwards. This proves, according to Sir A., that the disease is the result, not only of constitutional predisposition, but specific local action, differing from common inflammation, which has generally subsided before the disease returns. We think that objection might be made to some items of Sir Astley's arrangement, and that some of his positions are not altogether unexceptionable. But our object is analysis not criticism, and we can reserve any remarks till we come to treat of the particular affections.

The diseases of the testicle are, 1st, common inflammation, acute or chronic ; wasting of the testicle : 2dly, specific non-malignant diseases, as the hydatid or encysted ; the irritable ; the mumps affecting the testes ; the ossific ; single cysts and solid tumours of the epididymis or testes ; the scrofulous ; the venereal, which some may doubt : 3dly, the malignant diseases, fungoid and scirrhus. From this enumeration our author has excluded the affections of the tunics and cord, as the hydrocele, &c. which he will describe in another part of the work. The testis is less prone to disease than the breasts, but the cord and tunics are subject to a great variety of complaints. Diseases of the testicle are more amenable to treatment than those of the breast, and Sir Astley allows that castration is too often unnecessarily and precipitately performed.

The causes of disease of the testicle, independent of constitutional predisposition are, first—their pendulous situation, rendering them more liable,

by the gravitation of the blood, to congestion and inflammation;—secondly, the excitement of passion, often not immediately indulged, which leads to accumulation of their secretion, distention of the seminiferous tubes, and inflammation;—thirdly, exposure to mechanical injury;—fourthly, the strong natural sympathy existing between the testicles and urethra and prostate gland, rendering them very apt to inflame sympathetically: but the testis sympathises chiefly with the membranous and prostatic portions of the urethra;—fifthly, the changes which the gland undergoes at puberty and in old age, especially the latter;*—sixthly, the descent of the testicle, which is often delayed for some years after birth, and sometimes till adult age, during which time it remains in the inguinal passage or groin, exposed to injury, and prone from its unnatural situation to suffer diseased changes;—seventhly, vicissitudes of temperature. To these we will add—eighthly, hereditary predisposition; for, in a case we lately saw, the patient's grandfather and uncle by the father's side had suffered from disease of the testicle; in the patient to whom we allude, the complaint yielded to mercury.

ACUTE INFLAMMATION OF THE TESTICLE.

Hernia humoralis, the name by which this affection is usually known is manifestly erroneous, but, as in other instances, the term is retained from habit and for convenience, when the old signification and sense are overlooked. Although the consequences of gonorrhœa, it has nothing gonorrhœal in its character, or venereal in its nature, and Sir Astley would prefer the name of testitis, if he were not afraid of appearing affected.

The first symptom of this affection, when it arises from sympathy with the urethra, is an irritation of the membranous or prostatic part of the canal, as if some drops of urine still remained in the commencement of the urethra. This is succeeded by tenderness in the cord at the ring, and by swelling and pain in the epididymis. The testis next swells to two or three times its natural bulk, becomes extremely tender, and by its weight drags painfully on the spermatic cord. The pain is obtuse, heavy, and aching, resembling that produced by squeezing the testicle, and arising from the same cause—the distension of the glandular structure, whilst the tendinous and inelastic tunica albuginea does not yield to the swelling from within. The pain and swelling extend along the cord to the inguinal canal, producing great uneasiness in the groin and spinous process of the ilium, hip, and inner part of the thigh on the affected side, and fixing itself at length more particularly in the loin. The nervous connexions will readily explain this, as well as the nausea and sometimes severe vomiting, the colicky pains in the intestines and constipation. The pain and inflammation extend to the neck of the bladder, occasioning dysuria, and frequent desire to make water. The testicle when much swollen retains its original form, but is flatter at the sides and feels excessively hard. The epididymis swells more in proportion, and continues swollen longer than the testis, which is owing to its covering being less compact. The globus major and minor are more affected than the body, and the former generally enlarges before the cord.

* Our author has seen a healthy boy, between twelve and thirteen years of age, affected, without obvious cause, with inflammation in the left testicle.

The latter becomes enlarged and tender, and, being compressed at the ring, gives rise to much uneasiness at that spot. The cremaster is in some cases affected with spasm. The scrotum is thickened and red, it pits upon pressure from effusion into its cellular texture, its veins are enlarged, and bleed freely when opened.

The symptoms take many days to arrive at their height, and still longer to disappear; evil consequences being frequently produced, which ever afterwards remain. If gonorrhœa be the cause, the urethral discharge usually stops or is considerably diminished, but generally returns as the inflammation subsides. During the violence of the complaint, the system often suffers severely from fever, and the blood, if drawn, is buffy.

Acute inflammation of the testis, when from sympathy with the urethra, rarely proceeds to suppuration; when from a blow or atmospheric changes, suppuration does occasionally occur, all the symptoms being aggravated and rigors superadded. The matter too is confined within the tunica albuginea, which does not readily give way; the pus is therefore long before it discharges itself after fluctuation is felt. The abscess generally breaks at several apertures, which form sinuses difficult to heal, and give issue to a seminal as well as a purulent discharge.

The diagnosis of this affection is seldom difficult, the only complaint with which it can be confounded is hernia. Still it is only congenital hernia that it can resemble, for, in common inguinal hernia the testicle can be readily distinguished. The history of congenital hernia, its long continuance, and its frequent descent from and return into the abdomen, contrasted with the gradual approach, excessive hardness, and severe pain in the loins, accompanying inflammation of the testicle, will serve as distinguishing signs. In a case of Mr. Samuel Cooper's in which the symptoms were so severe as to simulate strangulated hernia, the want of a particular protrusion at the ring, the absence of tension of the abdomen, the pain being confined to one side of the belly, and its not being increased on pressure, were the diagnostic marks. If a hernia had previously existed on the same side; if there be a swelling attended with exquisite pain, sickness, and vomiting, redness or a purple colour of the scrotum, constipation, and abdominal tenderness, then much caution is required both in treatment and diagnosis. It is best to give an aperient forthwith and a purgative injection to determine the question. The swelling will be harder than hernia, different in form, and more painful.

Hæmatocele may be mistaken for inflammation of the testis. The swelling rapidly following the blow, the ecchymosis usually present, and the comparatively little pain will distinguish it. We remember a case which appeared to be an urgent one of hernia. By the application of æther a small portion of gut was returned, but the bulk of the swelling still remained, and proved to consist of hernia humoralis and varicocele, a puzzling combination.

The causes of inflammation of the testicle come next under consideration. The most frequent is irritation in the canal of the urethra, and especially the membranous and prostatic portion, rarely the first six inches. In the early stages of gonorrhœa it is uncommon, most frequent when from ten days to three weeks have elapsed. The reason is, that when gonorrhœa has existed so long, the inflammation may extend from the first three inches

of the urethra to the membranous portion. Thus in a person labouring under gonorrhœa, who was executed at the Old Bailey, the mucous membrane of the membranous portion was found inflamed, and even blood extravasated beneath it. Sir Astley, however, has seen cold water injected into the urethra induce a swelling of the testicle, shewing that irritation of the early part of the canal can do so. Our author believes that the hernia humoralis is brought on by extension of the inflammation along the vasa deferentia, and he thinks that both testicles not being affected is no objection to this poison. He thinks that disease of one testicle diminishes the tendency to inflammation in the other, but this is perhaps problematical. It is not, as already explained, the most acute inflammation in the urethra, which acts upon the testis, but usually its declining stage, when the inflammation is rather extensive than violent, and of the erysipelatous character.

Astringent stimulating injections often produce inflammation of the testis, by lessening the urethral discharge. When injections are employed the patient should compress the urethra two inches from the orifice, a precaution which we find strangely neglected in practice. Bougies introduced into the membranous and prostatic portions of the urethra, often produce inflammation of the testis, and caustic bougies introduced so far have often the same effect. Instruments are often used unnecessarily, the obstructions resulting from temporary irritation ceasing under a merely soothing plan. A gentleman used a strong injection, which he thought produced a stricture; a bougie was passed, produced inflammation of the bladder, and was abandoned. In a year and a half afterwards he discharged a quantity of blood from the urethra, and two attacks of hernia humoralis succeeded. He has since been free from any obstruction. Any injury to the prostrate has the same effect, as sometimes happens after the operation of lithotomy. A high legal character suffered much from this cause. The enlarged prostrate of old age is occasionally attended with inflammation of the testis. Inflammation in the neck of the bladder produces the disease, as does a calculus in the bladder pressing on the orifice of the urethra, or one passing down the ureter, though the latter usually produces only spasm of the cremaster.

A blow on the testis is a frequent cause. If severe, vomiting instantly follows, and violent inflammation immediately succeeds. A person struck the testicle, next morning he could not make water, and when it came, by fomentations, it was tinged with blood. From that time the testis has been inflamed, and he has had a discharge of pus and blood at times from the urethra. A wound of the testis does not occasion the pain or inflammation which might be expected. Sir Astley has known a lancet and even a trocar thrust into it, a sickening pain followed, but the wound healed readily. In one case, however, violent inflammation and suppuration succeeded such a trocar-thrust.

An undescended testis is frequently exposed to injury and inflammation. Mr. Pott has detailed a good case of this kind, to which Sir Astley alludes. Wearing a truss on such a testicle, from mistaking it for hernia, on its being accompanied with hernia, produces great pain and inflammation. The surgeon must be careless in not observing the absence of the testis from the scrotum.

Vicissitudes of temperature affect the scrotum like other parts, and, by sympathy, the testes inflame. In a person who was in the retreat of the Duke of York's army in the Netherlands, the scrotum was frost-bitten and sloughed away. The sudden change of dress, from a warm to a very slight one, produces inflammation of the testicle. Sponging the parts with cold water, or going into the cold bath whilst the body is heated, are followed by the same effect. The excitement of the passions, with incapacity to indulge them at the moment occasions great pain, and, from the distention of the tubes and unyielding nature of the tunica albuginea, is apt to give rise to inflammation.

The short section on the effects of inflammation of the testis cannot be much abridged; we therefore give it in Sir Astley's own words.

"An effusion of serum into the tunica vaginalis is a frequent effect of inflammation of the testicle; but this species of hydrocele usually becomes absorbed as the inflammatory attack subsides. The second effect which it produces, is adhesion and thickening of the tunica vaginalis, which is often mistaken for a disease of the testicle itself. This adhesion of the tunics is a very frequent consequence of inflammation of the testicle; and I have found, on examining testicles which felt harder than usual, that one surface of the tunica vaginalis was glued to the other, in some cases partially, and in others entirely, by which the mobility of the testicle in the scrotum had become diminished, and it less easily eluded pressure and external violence.

A swelling of the epididymis is a third effect of inflammation, which is sometimes placed at its lower, and sometimes at its upper part:—when at the lower, it is seated in the cellular tissue of the vas deferens, where it forms its first convolutions; but it often is not an effusion into the interior of the duct, which the patient will be grateful to learn, as his mind is rendered anxious about its influence on the function of the part—Often these indurations are the effect of adhesion in the tunics only. When seated in the upper part of the epididymis, in the globus major, adhesive matter is effused into the cellular membrane, between the coni vasculosi, at their termination in the epididymis; and sometimes a sac, containing a mucilaginous fluid, is found at this part.

This portion of the epididymis is more frequently diseased than any other part of the testis or epididymis; but the result is less important here than in other parts, because some of the vasa efferentia and coni vasculosi still carry the semen from the testicle to the epididymis.

The coni vasculosi under this state of disease are thickened, hardened, and of a dark brown colour: in six testicles which I received at one time for dissection, of old persons, four of them were thus changed.

I have also a preparation in my possession, in which, after inflammation, a tumour, somewhat larger than a pea, was seated amidst the seminiferous tubes of the testicle, surrounded by an extremely vascular surface; and the testis was larger than natural.

In general I observe that where there are marks of inflammation upon the tunics of the testis—such as, for example, adhesion—the substance of the gland itself is changed, the septa are much more apparent than natural, the seminiferous tubes appear to be less in number, are undoubtedly much reduced in their size, and many become cords instead of tubes." 23.

Wasting of the testicle, another effect of inflammation, requires consideration. It is more common at the age of puberty than any other time; it may follow a blow, occur spontaneously without obvious cause, or, though rarely, be the effect of gonorrhœa. The testicle inflames and swells; then, as the inflammation subsides, absorption commences, but does not stop till

the whole of the glandular structure is absorbed, leaving the tunics adherent to each other and to the septa. The whole substance which remains is not larger than the end of the finger, and feels a firm and very solid body. In a wasted testis of St. Thomas's Hospital, quicksilver would only descend in the vas deferens half way between the ring and testis. A gentleman, aged 19, struck the testes on the pommel of a saddle. Acute inflammation in one testis followed, and when this subsided it wasted. The spermatic cord and the vas deferens were much diminished in size; a small portion of the epididymis could be felt; the testis was no larger than a pea, when swollen by moisture, and less sensitive than natural. The habit was scrofulous—the virule powers were not diminished. A gentleman, whose testis was wasted to a small hard body, felt constantly pain in the part, if unwell from a cold or other cause.

These facts prove conclusively that persons *should* be upon their guard in avoiding the causes, or, if excited, carefully attending to attacks of inflammation of the testicle. They will *not* be on their guard, for all that Sir Astley can say. The important subject of treatment now comes upon the tapis.

The first and most important measure is suspension of the scrotum by means of the bag-truss or handkerchief. If the former is used, the two anterior tapes should be carried to the loins, where they are to cross and be tied on the fore part of the abdomen; whilst the two posterior ones should be brought up to the fore part of the groin, upon each side, and be fastened to those which surround the abdomen. If the hinder tapes are carried between the thighs as they usually are, they are worse than useless. If a handkerchief is employed, a piece of tape should be added to the middle of its base and carried between the thighs to the back, where two of the angles of the handkerchief are to be tied, whilst the third angle is brought forwards and upwards before the scrotum. A lotion, composed of liq. plumb. acet. dil. ʒij. sp. vin. ten. ʒj. is extremely useful. Vinegar or the liq. ammon. acet. expose the patient to observation by their scent. The muriate of ammonia, one drachm to a pint of water, is an excellent application, and has no smell. Active aperient medicine is required, and by these means the more acute inflammatory symptoms are removed. If these continue, leeches must be applied, or, if the patient object to the exposure they occasion, he may stand before the surgeon, who punctures three or four veins of the scrotum with a lancet, introduced transversely with respect to them. The bleeding will be free, especially if the parts be placed in warm water. As soon as three or four ounces of blood are drawn, he should recline upon a couch, when the bleeding almost immediately ceases. The recumbent posture must be insisted on for obvious and very sufficient reasons; the scrotum, however, being still supported. After the preceding means have been adopted, the relaxation and perspiration produced by fomentations and poultices are the best applications. The poultices should be thin, but their material is of little consequence. If the inflammation continue, local bleeding must again be had recourse to. Sir Astley has several times seen it absolutely necessary to bleed from the arm. Emetics in this stage of the disease are very useful, and nauseating doses of tartarized antimony are powerful adjuvants to treatment. In some irritable habits the continuance of depletion will prove injurious, and in such, when the pulse

is jerking, calomel and Dover's powder often succeed when other means will fail. When suppuration has taken place, we must continue the fomentations and poultices, and leeches will lessen the extent of the suppuration. As soon as matter can be perceived it should be discharged by a lancet, as the tunica albuginea is long in ulcerating, and the secreting substances of the testis will be destroyed. Frequently the abscess is in the testis, often in the epididymis; more than once Sir Astley has seen it in the chord. The opening must be sufficiently free for the easy escape of the discharge.

The next object that engages the attention of the surgeon is the removal of the effects of inflammation of the testicle. The local applications for the enlargement and thickening left behind are poultices of vinegar and oatmeal, or the ammon. mur. lotion, with vinegar mixed with bread. The cerat. saponis, or linim. hydrargyri, or iodine ointment are also useful. The umbrella oil silk is an excellent application, promoting free secretion, and unloading the vessels; the suspensory bandage may be formed of oil silk or lined with it. The emplastr. ammoniac. c. hydrargyro is useful, the tincture of iodine may be applied, and the pyroligneous acid is a powerful irritating application.*

The best constitutional treatment is to give small doses of the oxymuriate or pil. hyd. gr. iij. ant. tart. gr. $\frac{1}{4}$; or ext. col. c. gr. iij. with pulv. ipec. gr. ij. in a pill each night. If it nauseate, so much the better, as nausea promotes absorption. The liquor potassæ is a good medicine. Sir Astley has seen the enlargement of the epididymis yield to a three months' course of the Plummer's pill and sarsaparilla. We may state, that the combination of the liquor potassæ and sarsaparilla is of service in strumous habits, and we have witnessed benefit from a solution of the hydriodate of potass, in conjunction with the steel wine. The tincture of iodine is useful, but it must be carefully watched, as it is apt to disorder the health. In obstinate cases, Sir Astley proposes the exhibition of the tincture of digitalis, but he believes that the promotion of nausea is the most powerful of all agents on the absorbent system. Sir Astley has not witnessed much advantage from electricity. The fact is, that these enlargements, especially of the epididymis, too often resist every medicine or application, and yield, at length, with the perfect and permanent re-establishment of health. Sometimes, indeed, they never yield at all.

Adhesions of the tunica vaginalis are not of sufficient consequence to justify active measures. If irritation or stricture of the urethra have been the cause of inflammation in the testis, bougies may be employed when the latter is removed, but not before. This concludes the chapter on hernia humoralis, a very important and useful one, because the disease is of frequent occurrence, generally tractable if treated well, followed by many bad effects if treated ill.

SIMPLE CHRONIC DISEASE OF THE TESTICLE.

Chronic inflammation of the testis is of very frequent occurrence, has of

* A mixture of the unguentum potassæ hydriodatis and unguentum hydrargyri fortiss, half an ounce of the former to an ounce and a half of the latter, is extremely useful. It usually produces some vesication.—REV.

ten been confounded with malignant affections, and has repeatedly given occasion for an unnecessary castration. This is sufficient to impress on the minds of our readers the necessity of studying it with care. It begins in a hardness and swelling of the epididymis, at first unattended with pain, and discovered by accident. Gradually increasing, the testis becomes involved, but its separation from the epididymis may be distinctly traced. The testis usually retains its natural smoothness of surface, but is preternaturally rounded in form. Clear serum is, in many cases, effused into the tunica vaginalis; the part is indolent, free from pain, and handled with surprising roughness by the patient. The health appears to be unaffected, but in this, as in most chronic diseases, there is something out of order. Each epididymis and testis are often contemporaneously affected; hydrocele often exists on one side and not on the other, occasionally on both. One testis will cease to swell, and the other then become enlarged. The testicle and epididymis continue smooth under great increase, and the cord is not usually hardened, but its veins are a little swollen, and, consequently, it is somewhat increased in size. We have seen the cord enlarged and thickened in one or two cases. When the enlargement in the testis and epididymis is considerable, slight pain, and a sense of pain in the loins and thigh are complained of. Such is the history of the disease, very well detailed by Sir Astley Cooper. We have not found it follow this course invariably. We have seen much more pain complained of; the affection has not always begun so unequivocally in the epididymis; the distinction between this and the testis has not been so manifest at a more advanced stage; the surface of the latter has not been so uniformly smooth and regular, but more disposed to be knobbed and uneven. We should say that, in the majority of instances in which thickening and induration are left after acute inflammation, the epididymis is affected; but, in the slow chronic disease described by Sir Astley Cooper, we are disposed to doubt if this be so generally the case.

In the state above described by our able author, the gland remains for months, receiving little other attention than support. From catarrh, a slight blow, or an excess, it becomes additionally swollen, attended with great pain in the part and loins, and swelling and redness of the scrotum. These symptoms are relieved by leeches and purging; but, in a few weeks, the return to exercise and the usual mode of living induces a relapse, requiring similar treatment. A repetition of these attacks so wearies the patient, that he wishes for castration.

At length suppuration is induced, and is indicated by great pain, redness of the scrotum, and obscure fluctuation. The abscess is felt at the extremity of the epididymis, or in the testis; if punctured, thick, ill-formed pus is discharged. If formed in the body of the testis, the tunica albuginea retards greatly its progress to the skin. One or more sinuses are produced, giving issue to seminal discharge, which retards their healing, or prevents it. During the progress of the suppurative inflammation a hydrocele is formed, and the fluid is generally coloured by the red particles of the blood.

A prominent object of attention is the granular swelling of the testis, which arises from the cavity of the abscess, whether of the epididymis or testis. Exuberant granulations spring up, and as they grow, being compressed by the albuginea, they protrude through the ulcerated opening of the tunic and form a granulated swelling, often seen on the scrotum.

It resembles in principle the fungus cerebri. It has been mistaken for cancer or fungus, but it may be cured by local applications, and is in no respect malignant.

Sometimes this disease will really require removal, from the continued irritation and discharge which it produces, or from its great inconvenience. When removed and dissected in the adhesive stage, the appearance of the testicle and epididymis is changed into a general yellowish white appearance, possessing considerable solidity. It was this, we believe, that has induced Mr. Brodie to name the affection, the yellow tubercular disease of the testicle. If a section is made of the testis, thrown into water, and agitated, a whitish yellow fluid proceeds from the seminiferous tubes, which appear emptied and are much dilated. But still the same bulk remains, owing to the cellular membrane being loaded with yellow fibrine. The rete is filled with the same secretion as the tubuli, the epididymis is similarly diseased, and sometimes the vesiculæ and vasa deferentia are distended with a similar morbid secretion. But the effusion, whether in one or the other, admits of being absorbed by proper treatment, and appears to leave the testicle capable of performing its functions. Sometimes we meet with an abscess or abscesses in the testicle and epididymis, connected with the adhesive or fibrous effusion; and this is combined with more or less of ulceration, destroying a part of the testicle, and rendering complete recovery of its functions impossible. Several abscesses are sometimes found in the same testicle. In the third place, we find sinuses externally leading to these cavities. Still secreting semen, the cavities and their outlets are prevented from closing, till the secreting surface be healed or destroyed. In the fourth place, when the granular swelling is produced, the granulations are found to spring from the seminiferous structure, and project through the ulcerated opening of the testicle or epididymis, most frequently of the former. These points being ascertained, much light is thrown upon the treatment to be adopted by the surgeon.

With respect to the causes of the disease, Sir Astley believes that there is a constitutional proneness to this complaint. It occurs in the scrofulous, the debauched, after long mercurial courses, and in the debilitated habits in which we find chronic carbuncle. Frequent exposure to wet, cold, or fatigue, and excessive sensuality, are predisposing causes. The most frequent occasional cause is urethral irritation or organic alteration, and many of the causes of acute inflammation of the testis are, in different cases, the precursors of this affection.

We arrive at the treatment. The disease is not malignant, the lumbar or inguinal glands never being seriously affected. The great efforts of the surgeon should be directed to the adhesive or early stage, when fibrous matter only is effused, for we have seen that it is removable, and the organ capable of recovering its functions. The patient should steadily observe the perfectly recumbent posture for a month, for it will not be enough to sit upon a sofa with the legs supported. He is to take calom, gr. iij. opii, gr. j. night and morning, till the gums are affected, which they should continue to be for a month at least. Every fourth morning he should take a black draught, with liq. ant. tart. ℥. xx. The local treatment should consist of leeches to the scrotum twice in the week, fomentations thrice daily, and a lotion of liq. ammon. acet. ʒv. sp. vini, ʒj. or equal parts of camphor mix-

ture and water. By this plan, perseveringly followed for a month or six weeks, the disease rarely fails to yield prior to the suppurative stage. When the disease is sympathetic with the urethra, it will be right to use bougies, if the stricture be considerable, before the patient quits the recumbent posture. If the urethra be merely irritable and the stricture slight, it will be better not to use bougies, as the constitutional treatment for the testis often relieves the urethra, without any risk of aggravating the local disease. We think Sir Astley has omitted one remedy, mercurial inunction on the scrotum. It often aids the operation of the calomel and opium constitutionally, and appears to possess a local influence also. In bad habits the sarsaparilla and oxymuriate are preferable to the calomel and opium. The blue pill is likewise more adapted to some cases, but the principle is the same in all.

Sir Astley adds three cases illustrative of the foregoing positions;—we shall briefly notice two. A British officer of rank was attacked with inflammation of the testis in the Peninsula. He suffered much from fatigue, the disease was obstinate and thought to be malignant, and the testis was removed. Some time afterwards the testis became similarly affected, and a consultation of Mr. Rose, Sir E. Home, and Sir Astley was called. They agreed to the plan already detailed, and in a few weeks the officer perfectly recovered. It is fair to suppose that the other testis might likewise have been saved.

If once suppuration, no matter how little, has occurred, the symptoms may appear to yield, but they return so soon as the patient rises and gives up mercury. Thus, a cavalry-surgeon had chronic inflammation of the testicle, which had often been relieved by treatment, yet returned when he resumed his duties. Tired out, he requested Sir Astley to remove the part, which he did. In the centre of the testis was a chronic abscess.

In the treatment of the granulations it is an object to reduce their exuberance, and bring them level with the skin. Pressure by dry lint and adhesive plaster bound round the scrotum effect this purpose. If this does not succeed, powdered sulphate of copper daily sprinkled on the surface may, or powdered alum, or the nitrate of silver. We have seen the powdered nitrico-oxyd of mercury very serviceable. Sir Astley has known arsenic thus applied destroy life, and the same placed in solution on a fungous disease of the eye, produced fatal inflammation of the stomach. Sir Astley has several times excised the granulations with success. He makes an elliptical incision around the projecting granulations, and then carries the knife under the whole, and close to the tunica albuginea, excising the fungus, and leaving the epididymis and testicle uninjured. The edges of the skin are to be brought together, and made to unite if possible. Union may be aided by pressure with adhesive plaster, and approximation of the integuments over the opening in the tunica albuginea. The operation must of course be preceded by proper constitutional treatment.

Our author has adopted another proceeding on more than one occasion, with success. He passed two ligatures through the edges of the skin at the circumference of the swelling, and carried them through its base. He then cut off the granulations even with the scrotum, and brought the edges of the skin over the new surface. If, however, the swelling be very large and the testicle much reduced, it is better to remove it at once. For the trou-

blesome sinuses following abscesses in the testicle or epididymis, calomel and opium, with the recumbent position, are the best constitutional remedies, injections of the sulphate of copper or the oxy muriate of mercury, the best local ones. In an obstinate case, in which the abscess began in the globus minor of the epididymis, a deep incision was successfully made to divide the vas deferens there, prevent the continued secretion of semen from the orifice, and lead to the closure of the vessel. In one case the seton was employed. There had been abscesses and were sinuses in the epididymis of both sides. A gentleman passed a seton through each opening, and they both healed. In coition he has the sensation of emission, without it actually occurring. The testes are nearly of natural size, there is a hard swelling in the globus minor of each epididymis. When the operation of removing the testis is performed, the patient is free from future danger, with the exception of the vesiculae seminales being diseased. This is rare, and, by improvement of the constitution, may be dispersed.

THE IRRITABLE TESTIS.

This is a most distressing disease, and like other affections of the nature of *tic-douloureux*, it is extremely difficult to cure. The patient has an unnatural sensibility in a part of the testicle or epididymis, which is excessively tender to the touch, and painful upon exercise.

"Its sensibility becomes occasionally so much increased, that the slightest touch produces exquisite suffering: the pain is felt in the back and groin. The motion of the testis, and the slight pressure it receives from the clothes in walking, produce so great a degree of pain as almost to forbid exercise; and the patient is obliged to seek relief, by continually reposing upon a sofa, or by remaining in bed. The testicle is but little swollen; it is not equally tender in every part, but there is a point in which the morbid sensibility particularly resides. The epididymis and spermatic cord also suffer from similar sensibility; and if the part be not supported, the pain is scarcely tolerable; and when the patient is in the recumbent posture, he is obliged to place himself on the opposite side to the disease, or he does not rest. He has pain in the groin and thigh upon the same side, and the testicle appears fuller and more loaded on that side than the other. Motion, in most cases, produces not only pain at the time, but much increased inconvenience for some hours after; the pressure of the hand in examining it occasions great uneasiness, and leaves the testis additionally sensitive. The stomach is rendered extremely irritable, even to the degree of occasioning vomiting." 50.

It may continue for weeks, months, even years; and if at any time a temporary relief is experienced, a slight indulgence or return to exercise renews the patient's sufferings. Sometimes the misery and inconvenience are so great, that the patient insists on the removal of the part, which Sir Astley has performed in three instances. To supply a more graphic description of the malady, our author inserts some letters from patients who were tormented with it. We shall give a quotation from one, which appears to be written by a medical man.

"Probably this disease is seated in the nerve of the spermatic cord, and perhaps also in the plexus which surround the arteries; in which case you know the operation could not be of much service. To this conclusion I have the more decidedly come, from the circumstance that the pain is of a numb pricking kind, answering to that proceeding

from a compressed or irritated nerve, and that it is uniformly increased by whatever disturbs the position of the testis, or presses upon the ring, or the course of the cord. I can bear the erect position for a short time, that is, for a few minutes, without my suffering being much increased, provided the testis is properly adjusted, and there is no pressure or irritation applied to the iliac or pubal regions of the right side. When I lie on the left, the pain is of the dragging kind, as if extending from the region of the cæcum coli towards the part where the injury on the cord was inflicted, as it crosses the pubis; whereas, when on the right side, it is more sharp, and feels as if some part which is tender and sore, were pressed upon by those in its neighbourhood. I feel most ease, therefore, when I lie on my back, the testis being well adjusted, and pressure of the bandage removed completely from the side. There is considerable fulness or thickening on the side of the pubis in the site of the injury, which is always increased, and extends higher up in the direction of the cord, when the pain has been greater for a little time; but the fulness and tension in the right iliac region, upon the whole, has been less for two or three months.

After medicine, which has by its action produced two or three stools, I have uniformly suffered more pain for a day; and the passage of the flatus through the cæcum is attended by a somewhat similar effect, though of much shorter duration. On examining the cord as accurately as the tender state of the part will allow, it appears to be free from disease; and the testis, which, however, hangs lower than the other, excepting its greater delicacy on being handled, seems to remain unchanged in size and structure.

My general health continues good, and every function natural.

My urinary organs are perfectly healthy; and I may remark that when the penis is erected, I am much freer from pain, probably in consequence of the contracted state of the scrotum, that takes place at that time, supporting the testes. This is a crude and hasty sketch; but from it you will be enabled to collect the particulars for your own arrangements.

The distance of time between the accident and my beginning to suffer much, with the exception of an occasional stounding once or twice in a month, was about eighteen months; and the length of time I have now been confined, always entirely to the horizontal position, is more than a year." 55.

In another case the individual thought he could trace back the origin of his disease to about eight or nine months before his marriage. During that time he lived too well, grew corpulent and bloated, took little exercise, and did not cohabit with women as he had previously done. Before the complaint began he had violent erections during his hours of rest, when the testicle and vessels felt ready to burst, and obliged him to get up and walk about for some time. Soon after his marriage the symptoms commenced, and in a few months he experienced some pain in discharging the testicle, which at last arrived at an alarming height.

We pass to the cause of the disease, a subject involved in some obscurity. It is clearly not inflammatory, for of inflammation there is no symptom. Sir Astley believes that the disease is seated in the nerve, and that it is of the nature of *tic douloureux*, in which the action is allowed to be generally below rather than above par. Mr. Thomas, the President of the College of Surgeons, dissected a suborbitary nerve affected with *tic douloureux*, but found nothing unusual in its structure. This nervous affection is sometimes local, as in an amputated limb; sometimes constitutional; sometimes sympathetic with disease of the brain and its membranes, as in the well-known case of Dr. Pemberton. In the irritable testis dissection teaches nothing,

except that it is not inflammatory, for in three testicles examined by Sir Astley, he found no change of structure. The digestive functions are often impaired, but our able author looks on this as the consequence, not the cause, of the derangement of the nervous system; it is not permanently relieved by diet.

Treatment of the Irritable Testis. The surgeon's objects are to increase the tone of the nervous system, and to allay the constitutional and local irritability. Various medicines have been recommended and are employed with the first view:—quinine in large doses—bark—the carbonate of iron—the liquor arsenicalis—ammonia in large doses, combined with camphor.—Wine, brandy, and other spirituous drinks relieve the severity of an attack, but tend to its renewal and increase. The second object is to allay the irritability of the nervous system. For this we have the various narcotics, of which a good form is, conii, gr. iij. opii, gr. j, extr. stramonii è seminibus gr. ss. bis terve die. Belladonna, from gr. ss. to gr. iij—hyosciamus—the black drop and other preparations of opium—and calomel, opium, and antimony in combination, if the secretions of the liver and skin be defective. The local application of belladonna* in the shape of a plaster has been occasionally useful; so have opium and camphor, rubbed upon the part; ice has sometimes produced a cure. Applying a blister to the groin and thigh in the neighbourhood, and maintaining a discharge by the ceratum sabinæ cum opio is of service—irritation of the skin by the tincture of iodine has been tried with good effect—and the pyroligneous acid on the scrotum may be used, but it requires care.

When the complaint arises from organic disease of the brain, mitigation of symptoms is all that can be expected, but altered action in a nerve or in the nervous system generally admits of cure. A sea voyage to a warm climate has been known to give great relief.

It is generally Sir Astley's plan in this disease to begin by giving calomel and opium, so as slightly to affect the salivary glands and excite all the secretions; to these the sarsaparilla may be added, as it lessens irritability. He applies a blister to the groin, and keeps up the discharge by the ung. hyd. and cerat. sabinæ in equal quantities; and to the testis itself an evaporating lotion of diluted spirits of wine and æther, or of the nitrate of potass with muriate of ammonia. A light discharge from the commencement of the urethra, produced by the unguentum lyttæ is at times of use. But in spite of all that our art can do there are cases which will not yield, and in which the patient insists on the extirpation of the part. Of these Sir Astley details three. In all the relief was complete and permanent, but in the first the wound healed slowly, and one or two small abscesses formed in the scrotum.

INFLAMMATION OF THE TESTIS FROM CYNANCHE PAROTIDEA, OR MUMPS.

The cynanche parotidea is produced and accompanied by a species of fever the effect of which is a swelling of the parotid, and sometimes of the

* One part of the extract to about five of ceratum saponis, spread on leather. If stronger it is apt to produce poisonous effects on the system.—REV.

submaxillary and sublingual glands, occasionally accompanied with an enlargement of the mamma in one sex, and testis in the other. The disease principally affects the young, and the glandular enlargements are sometimes seated on one side now and then on both. The disease reaches its height in a few days, then begins to decline, and in a few days more it usually disappears. Suppuration is rare either in the parotid, the mamma, or the testis. In the first case seen by Sir Astley, both the testis and epididymis were enlarged and tender, but the patient soon recovered. In another case each epididymis and testicle were enlarged, and of pyramidal form, owing to the epididymis being principally implicated; the scrotum was red, and the enlargement of the left side exceeded that of the right. This gentleman had formerly suffered from hernia humoralis, and the testicle continues swollen, although the fever which preceded and produced it occurred a month ago. The mumps in children are most infectious. In a school at Hackney, consisting of from thirty to forty, rather more than thirty were affected with the disease within the space of three weeks, but in no instance was there a metastasis to the testis.

When the testicle inflames in cynanche parotideæ, it generally happens about the age of puberty, seldom before that, occasionally so late as between forty and fifty. The swelling of the salivary glands and the enlargement of the testes are generally proportioned to the severity of the cynanche. The affection of the testes is more frequent than that of the mammæ. Why the testis should be affected we do not know, as its structure differs entirely from that of the parotid. It has been said to waste after this complaint, but our author has never known it to do so, though inflammation from any cause, at the age of puberty, will produce that effect.

The treatment is very simple; the liq. ammon. acet, with the sulphate of magnesia, salines with antimony, or calomel pill and antimonial powder. Leeches are proper, and a simple poultice should be applied to the neck; the best lotion to the testis is the liq. ammon. acet. and sp. vini. Sir Astley dreads the use of evaporating lotions on the neck, as he once saw them produce fatal symptoms of pressure on the brain, in a boy about eleven years of age.

VI. HYDATID OR ENCYSTED DISEASE OF THE TESTICLE.

This is a comparatively rare disease, of a specific kind, and, as it appears to Sir Astley, entirely local, as he has seen it in persons enjoying excellent health, who have retained that health after removal of the testis, and in whom the disease has never shown itself at any future period. It is chiefly seen at about adult age, or between eighteen and thirty-five, although he has known it occur at forty-nine. It has been said to begin in an enlargement of the epididymis, but it is usually discovered by accident when it has attained considerable bulk. Sir A. has certainly several times seen the end of the epididymis containing cysts filled with fluid. It is unattended with pain, until it has become so large, that the unyielding albuginea exerts great pressure on the contained gland. There is little tenderness on pressure, unless it be considerable—the natural form of the testis is preserved, being rounded before, flattened on the sides, and not so pyriform as an hydrocele

—the epididymis is usually distinct, but not always so—the veins of the cord are enlarged, and so are those of the scrotum. The swelling gives, on handling, the sensation of fluctuation, but this is deceptive, as the part yields only at the spot which is compressed. If the tumour be strongly pressed, the patient feels as if the testicle were squeezed. The weight of the organ is obviously augmented, and when its size is much increased, there is pain in the loins, and inconvenience from the bulk. The appearance of the individual often indicates even robust health, and therefore the first impression on the surgeon's mind is, that this disease must be hydrocele.

The complaint is so local, that, but for the irksome weight, and the indecent and inconvenient size, it would scarcely require removal. Sir Astley declares that the cord does not become affected, nor are the absorbent glands of the groin or loins irritated by it; in short it is a disease of the testis and epididymis only. The cysts connected with fungoid disease, differ entirely from this hydatid complaint, for they contain a fungous growth within them. We are afraid that Sir Astley has overrated the mildness and local character of this affection. In a case at St. George's Hospital, in which castration was performed by Mr. Brodie on a testicle exhibiting the dydatid disease, death from peritonitis ensued, and an opportunity was afforded of examining other parts. The lumbar glands were affected in a similar manner with the extirpated testis. Again, it is by no means uncommon to find cysts, containing no fungus whatever, in testes and breasts contaminated by fungoid disease.

On dissection of the hydatid testis, the tunica vaginalis is thickened and partially adherent; the albuginea universally denser than natural. The testis is composed in part of a solid structure and in part of cysts, varying in size from the head of a large pin to the magnitude of a small marble. The small contain a serous fluid, transparent and yellow; the larger have undergone a change from inflammation, their coats being thickened and their contents mucous. The cysts containing serum are highly vascular, but those which have been inflamed cease to be transparent.

"The appearance of the testicle would indicate that the cysts are enlargements and obstructions of the seminiferous tubes, thus increased by the accumulation of fluid within them, and connected with each other at their different convolutions; but their origin must be in a great degree conjectural, whether they be produced in the cellular tissue, by effusion into its cells, or in the seminiferous tubes.* They certainly are not of the nature of an mal hydatid; but I am inclined to the opinion, that they formed of enlarged and obstructed seminiferous tubes; for when I minutely dissect them, although at first sight they appear to be cysts, yet when traced, they are not distinct bags, but send out solid processes, by which they are connected with other bags, as the plate will shew. It ought, therefore, to be called the *Tubular Diseases of the Testis*." 83.

The appearances of the epididymis are similar to those of the testis, but the cysts are always smaller.

Diagnosis of the Hydatid Disease. It is often mistaken for hydrocele,

* "I have seen absorbent glands undergo the same changes from enlargement, obstruction of their cells and vessels, and from a fluid being secreted into them."

even by the surgeons of large metropolitan hospitals. Sir Astley, with that manly candour, which even the foul attacks of the slanderous publication that pollutes our profession have not yet been able to destroy, acknowledges that he has been on two or three occasions himself mistaken. He recommends that in all doubtful cases, a small incision be made with a lancet into the tunica vaginalis, in order to ascertain if it does or does not contain fluid. A better instrument than a lancet, is a fine grooved needle, about the size of a couching needle, but larger at the base. This makes a minute puncture, and fluid, if it exists, escapes along the groove. The general marks of distinction between the two diseases are, first—a yielding rather than a fluctuation;—secondly, a heavier tumour;—thirdly, the general form of the testis being preserved, although it is somewhat more pyriform than natural;—fourthly, the entire absence of transparency;—fifthly, the sensation of the testis being squeezed, if the compression be considerable;—sixthly, the dilated state of the vessels of the cord and scrotum;—seventhly, the testis in hydrocele can be felt at the lower and back part of the swelling, although obscurely.

Causes of the Disease. These are entirely unknown, although it is usually imputed by the parties to a blow or a cold. It appears to be in its nature an obstruction of, and altered secretion into, the seminiferous tubes.

Treatment. Our author has never seen any medical or local treatment of the slightest service. The removal of the part is the only measure that can give relief, and a system of depletion and abstinence for a week previous to its performance, will enable the patient to bear the operation well. Sir Astley observes that the strongest assurances may be given to the patient, that it will never produce any influence upon the surrounding or adjacent parts, and that the operation will be completely successful in eradicating it. He has never known it unsuccessful. We refer again to the case to which we have already alluded, to shew that the circumstances are not always thus favourable. Four cases are detailed by Sir Astley. The following affords the best sample of the progress of the complaint.

Case. Charles Denby, aged 49, was admitted into Guy's Hospital on the 23d May, 1804, with enlargement of the testis, which had begun two years previously in a diminution of the part, attended with a sense of weakness on the same side. It afterwards gradually enlarged, and in nine months from its first increase he applied to a very respectable surgeon, who introduced a trocar into the testicle. A very small quantity of water was discharged, and the case was pronounced to be hydatid testis. The disease increasing, the patient was admitted into the hospital, and on the 29th of May, Sir Astley removed it by the knife. On cutting into the testis there were cysts of various sizes, some transparent, others opaque: some filled with serum, others with mucus, and others again with a clear water, containing little animal matter. The wound quickly healed, and the patient was discharged cured, on the 16th of June.

VII. ANIMAL HYDATID IN THE TESTIS.

Sir Astley has never seen this disease in the living subject, and therefore

of the symptoms he knows nothing. Mr. Davie, formerly a dissector for St. Thomas's, brought our author a testis, the epididymis of which contained a cyst, formed by adhesion. Within the cyst was an hydatid, perfectly detached from the bag in which it was contained. The testis was larger than usual.

VIII. SCROFULOUS INFLAMMATION OF THE TESTIS.

Chronic diseases are founded either on an originally delicate and weakly formation, which we designate scrofulous; or on changes produced by anxiety, intemperance, &c. in an originally healthy frame: in fact, on debility, not congenital but acquired. The shortest idea which our author can give of scrofula is congenital or original debility, marked by peculiar and generally well-known signs. The skin is extremely thin and delicate, sometimes light and sometimes dark, but thin always. The blood that mantles on the cheek of the fair girl is considered by the looker-on as beauty; the physician sees in it the token of weakness, too often the herald of decay. This flimsy delicacy of integument also gives rise to the darkness beneath the eye, produced in such habits by slight indisposition, and dependent on removal in the veins. The thick upper lip depends on retention of blood in this vascular tissue; the thin skin shews the same vascularity in the tarsal glands. The hair is flaxen, or delicately silken, and red-haired persons are strongly predisposed to scrofula. But black hair and a dark skin, if the latter be thin, are evidences of the diathesis; indeed, we have often been struck by the black fine hair, large black pensive eye, and delicately sallow cheek of strumous children. Bad air and bad food may give rise to serious chronic diseases in healthily-formed children, but then the complaints resemble more the chronic affections of adults.

By reason of the thinness of the skin, the cuticle chaps and desquamates from a blast of cold air, parches and cracks with the Summer's sun. Vicissitudes of cold and heat excites inflammation of the cutis, the cutaneous absorbent vessels become irritated and the absorbent glands inflame. As the face and ears are most exposed, so the glands connected with their absorbents suffer readily; hence the frequent glandular enlargements in the neck.

When we look to the interior, we still find the same delicacy of structure and flimsiness of fabric pervading its component parts. The stomach and intestines are pellucid—digestion is imperfect. The parietes of the heart are less muscular than usual—the circulation is feeble. The coats of the arteries are so thin that the blood is clearly seen through them, in the last acts of life they do not empty themselves as under common circumstances, and their deficient tone must additionally weaken the circulation. The veins and absorbents probably partake of the same feebleness, at least the latter, and their glands are peculiarly prone to morbid action. The secretory glands, with the exception of the mucous glandules of the intestines, are little prone to scrofulous maladies. From the irritation and inflammation of the latter, the mesenteric disease is produced.

The nervous system differs greatly in different persons. In some, there is so remarkable an indolence and apathy, that a joint will enlarge without pain, and suppurate with scarcely any disturbance of the system. The mind, like the body, suffers no harm. But in others there is a remarkable irrita-

bility. From the very dawn of the complaint there is severe pain, and the slightest bodily excitement produces extreme constitutional irritation. Metastasis occurs from joint to joint, the temper is fretful and anxious to a degree, the least irritation is felt as through a magnifying medium, and there is often a surprising precocity of talent. The fond parent looks with admiration on her offspring, and crowds study on study, accomplishment on accomplishment, till consumption, or some other form of the due malady, snatches away the object of her pride and pernicious cares. The intellect is feverish, rather than healthy and powerful; its efforts should be moderated and repressed, rather than forced and encouraged.

The testis is one of the exceptions to the non-liability of secretory glands to scrofula. Even in very young children it sometimes becomes enlarged and very hard, without pain or inconvenience, the swelling being accidentally discovered, and remaining indolent for months or years, till it subsides with the improvement of the general health. More frequently it enlarges at the age of puberty, or from that to twenty years; often it appears in both testes without pain or tenderness, without discolouration of the scrotum or enlargement of its veins. But for its bulk the patient suffers no inconvenience. In children, and more frequently at the age of puberty, the inflammation proceeds to suppuration, generally in the globus major of the epididymis, sometimes in the globus minor. The body of the testis rarely suppurates, but, after ulceration of the epididymis, the testis becomes affected and the scrotum livid; ulceration ensues, and an abscess forms, which discharges ill-formed pus and some semen, at least after the age of puberty; and the opening continues unhealed for months and for years. In some persons, one abscess forms and discharges after another, and when one testis has suppurated, the other, if it has been hard, does the same, obstinately resisting all means of treatment for a great length of time.

At length the testes diminish till but little remains, and the seminal secretion ceases almost entirely. In a gentleman in whom both testes wasted, only two or three drops of thin fluid issued on emission, but he had erections and occasionally sexual desire. He had the disease for four years, and a sinus from each epididymis still discharges a quantity of fluid, which stiffens the linen. After venereal excitement, the sinuses give issue to an increased quantity of fluid, and in one patient it became of a brownish colour, as if slightly tinged with blood.

On dissection of the epididymis and testis, Sir Astley has found a yellow spot in it, surrounded by a zone of inflammation. When the spot ulcerates in its centre, the matter which it contains is not pure pus, but is composed of fibrine and serum, with a slight yellow tinge. Sir Astley has seen it in the globus minor of the epididymis, more often in the globus major. In the testis there are several such yellow spots, with surrounding inflammatory zone, and several yellow streaks are found amidst the tubuli. Scrofulous abscesses in the testes are sometimes accompanied by a granular swelling, like that which exists in the simple chronic disease.

Diagnosis. This disease is known by the period of life at which it occurs, by the patient's habit of body, and by the presence of scrofulous disease in other parts.

Treatment. We must invigorate the constitution by good air, especially that of the coast; exercise, avoiding riding on horseback; nutritious, unirritating diet; ale or porter, or wine and water at dinner, unless flushing and heat be produced by them. Tepid sea-bathing should also be used. Hyd. c. cret. with rhubarb on alternate nights, or pulv. calumbæ, rhubarb, and soda twice per diem; the vin. ferr. the tinct. ferr. mur. tinct. ferr. ammon. or ferr. carbon. with pulv. rhei in pills, are very useful. The quinine, with infus. ros. and dilute sulphuric acid should be given, and the liquor potassæ may be tried, but its long continuance is apt to weaken the stomach. The oxymurias hydrargyri in small doses with sarsaparilla, or with tincture of bark and rhubarb, is an admirable medicine. Concentrated compound decoction of sarsaparilla is often advantageous; our author has seen such serious effects from the tincture of iodine, that he fears advising it. Thus many different medicines are applicable to different cases, but the principle in all is to restore the secretions and give tone to the system.

In the early stage of the disease the ointment of iodine may be rubbed upon the part, or the liniment. hyd. or the emp. hydrargyri, the object being to stimulate the absorbents. As lotions, the liq. ammon. acet. with sp. vini, or the liq. plumb. acet. with sp. vini if there be pain. A dilute sulphate of copper lotion, or the black wash may be injected into the sinuses, if they form. Port wine may be used in the same manner. A solution of the oxymuriate has been useful, and our author has found the tinctura lyttæ or a solution of the nitrate of silver beneficial.

IX. VENEREAL INFLAMMATION OF THE TESTIS.

The venereal poison, when absorbed into the system, affects more particularly, and generally in order, the throat, the skin, and the periosteum, with the bone beneath it. The eye is more rarely affected, the testicle is the same, but the abdominal and thoracic viscera and the brain appear to be exempt from the influence of the poison. Some persons doubt the susceptibility of the testis to the venereal influence; but our able author has seen it so frequently enlarged during secondary symptoms, more especially in combination with cutaneous and periosteal affection—has seen it display the periodical evening exacerbations, although the recumbent posture was adopted at the time—and has known it yield so readily to mercury, just in proportion to the disappearance of the venereal symptoms, that he entertains no doubts whatever on the subject. The gonorrhœal affection of the testicle requires not the exhibition of mercury, it is sympathetic only.

Sir Astley believes that the venereal inflammation of the testis attacks the tendinous structure, the albuginea, and thence extends into its interior fibrous, not tubular part. He reasons thus, however, from analogy, for he has had no opportunity of dissecting this disease. The testis and epididymis enlarge to four or five times their natural size, and when one is attacked the other is apt to become implicated; indeed, in most instances, both are affected. The pain is not severe, but it is increased towards evening; the complaint very rarely proceeds to suppuration, but when it does, it produces a granular swelling, like the chronic abscess. The enlargement of the testis is rarely a concomitant of the syphilitic sore throat only; it frequently accompanies the eruption and periosteal inflammation. Its succeeding syphilitic symp-

toms, and being combined with those alluded to, as also its evening exacerbations, are the diagnostic marks of this disease. Eight cases are related; we can find room for one or two.

Case. A gentleman had a hydrocele with enlarged testis, and a surgeon, in attempting to tap the former, wounded the latter; he concluded there was a solid enlargement of the testis, and proposed extirpation. Sir Astley being called in found enlargement of the tibia with nocturnal pains, and a venereal eruption on the fore-part of the chest and abdomen. He ordered a course of mercury, when the syphilitic symptoms vanished, and the enlargement of the testis disappeared. The hydrocele was injected, the patient got well, has since been married, and had children.

Case. A gentleman, aged 32, had four years ago a chancre, for which he took mercury until it was healed. A few months afterwards he had pains in his limbs and his head, succeeded by enlargement of the tibia. He used mercury at various times, in sufficient quantity to subdue the symptoms, but not to cure the disease. Fourteen months ago a swelling began in the right testicle and gradually increased; then he suffered from pain in the left, in which a hardness remained. Sir Astley affected his mouth with calomel and opium, and continued it for six weeks. He made him observe the recumbent posture, apply leeches and a lotion of the liq. ammon. acet. and sp. vini. The swelling testis was entirely reduced, but when he left town the pain in his leg was not completely subdued.

Sir Astley is not inclined to dispute with those who doubt the syphilitic nature of such cases, but he is sure that he has seen enlargements of the testis combined with syphilis, and that the best mode of treating them consists in putting the system fairly under the influence of mercury, exhibiting afterwards a lengthened course of the compound decoction of sarsaparilla. He feels assured, in fact, that the testicle becomes affected during the progress and influence of the syphilitic poison upon the body in some persons, and that mercury is the only cure. At the same time we must employ the recumbent posture, local depletion, and evaporating lotions, although without mercury they will inevitably fail.

X. OSSIFIC INFLAMMATION OF THE TESTICLE.

The deposit of earthy matter not unfrequently takes place in structures not originally containing it. It is most commonly seen in the cartilages of the larynx, trachea, and ribs. It is found in ligamentous structures, as the symphysis pubis, sacro-iliac synchondrosis, and ligaments of the spine; in serous membranes, as the arteries, the pleura, pericardium, and peritoneum; and in most instances it is the concomitant of old age.

In dissecting enlarged and much hardened testicles, our author has sometimes met with deposits of earth variously situated. The tunica vaginalis occasionally undergoes this change, a beautiful specimen of which may be seen in the museum at Guy's Hospital. The tunica albuginea is still more frequently affected, little patches of earth being often seen between it and the tunica vaginalis testis; the albuginea is also sometimes entirely covered, as well as interstitially loaded with earthy matter. When a hardness is left by chronic inflammation at each extremity of the epididymis, earthy matter is sometimes found in the globus major or minor. The testis is less

frequently affected, but when very enlarged, portions of cartilage containing earth are found amidst the recently effused solid matter. A simple chronic disease will occasionally, under a length of time and changes of the constitution, undergo such alterations that various appearances will be found in it—pulpy substance, cysts, cartilaginous and ossific matter.

Case. James Verroil, aged 26, a musician at one of the theatres, was admitted into St. Thomas's Hospital, on the 8th April, 1824, under the care of Mr. Tyrrell. His aspect was sallow, his secretions irregular, and there was much constitutional derangement. One testicle was about the size of a large orange, rather uneven on its surface, hard in some parts, soft and fluctuating in others. There was at times severe pain in the affected part, extending to the loins. In the Spring of 1823, he had contracted a gonorrhœa for the fourth time, which in three or four weeks gave rise to inflammation and enlargement of the testis. By rest and evaporating lotions the inflammatory symptoms were reduced, but the testicle still remained hard and much larger than natural. He returned to his former irregular mode of living, and in the following October, the testis enlarged still more, particularly at the posterior part. From that time till his admission the enlargement had continued progressively increasing.

The remedies for chronic inflammation being tried without success, Mr. Tyrrell removed the disease. On examination of the testis, its substance was converted into a soft pulpy or medullary matter, in the centre of which was a small abscess. The epididymis presented a hard mass like scirrhus, had numerous portions of cartilage deposited in it, and at its upper part was a bunch of hydatids. An attack of peritonitis followed the operation, but the patient recovered, and left the hospital cured.

These cartilaginous and ossific deposits, whether in the membranes or in the substance of the testis, admit of no relief from medical or surgical treatment. The operation of castration is not generally required, as they remain for many years in an indolent state, and urgent measures are unnecessary, unless the complaint assume a malignant disposition, or be very inconvenient from its bulk. Sir Astley believes that such deposits are more frequently the effect of long-continued simple chronic inflammation, and of change of structure from age, than the consequence of malignant action in the part.

This concludes the portion of Sir Astley Cooper's magnificent work, which treats of the simple diseases of the testicle, a portion comprising 115 pages. We have placed within the compass of a little more than twenty, almost every individual observation and precept of the observant, experienced, and able Baronet. It has required no talent to do this, it merely needed dense and unwearied analysis. We have added few remarks of our own, for although the cases we have witnessed might justly enable us to say more, we thought that the most useful boon to our readers, would be placing before them the sentiments of Sir Astley Cooper, without the alloy of trite observations or specious criticism. Little summing up is required, for, in the present case, any censure would be absurd, and praise superfluous. We are not presented with flimsy theories, which would probably be upset by the visionary of to-morrow, but with solid precepts deduced from long and careful observations of the book of Nature. The malignant diseases of

the testicle, and the diseases of the tunics remain to be considered; they will occupy an article. Another will be devoted to the anatomical portion of the volume, and then all that is susceptible of review, will have been consumed. The plates of course we cannot analyse; and here we must be contented to express our admiration. They are executed in the best style, without exaggeration, without caricature; portraying with fidelity the diseases they represent, and adding force, truth, and vivid illustration to the descriptive department of the work.

XI.

MEDICAL REPORT OF THE FEVER HOSPITAL, DUBLIN.

By Dr. J. O'Brien.

In the annual report of the above hospital for 1826, the author had occasion to describe the formidable epidemic of that period—an epidemic the most extensive as to numbers, which had ever previously visited that city. It was computed that 50,000 persons, that is, about a sixth part of the population, had been involved in the calamity on that occasion, of whom, from three to four thousand died.

"Since that period a revolution not unusual in Epidemic maladies, and similar to those which mark the vicissitudes of other great natural phenomena in which extremes often follow each other in rapid succession, has occurred with respect to Fever in this metropolis. Not only has this disease fallen below its ordinary numerical standard, but at particular moments, it appeared to be altogether evanescent and extinct. On several occasions the number of cases of Typhoid Fever in this hospital, did not exceed half a dozen, and I have reason to believe, that a few occasions occurred, on which not a single case of Typhoid Fever was to be found in our wards."

In respect to the etiology of fever, our author completely overturns the medico-political doctrines of Dr. Corrigan, which have been bruited about in the *Lancet* and the newspapers—namely, that *want* is the cause of the Irish epidemics.

"There is one fact, however, which he thinks it important to notice, and which, he conceives to be a decisive refutation of that opinion, which would attribute the generation of Epidemic Fever to the sole and exclusive agency of public distress and famine;—namely, that during the period of Epidemic intermission, if we may be allowed the phrase, just now described, when this disease had nearly disappeared from amongst us, public distress and suffering had never previously, perhaps, attained to so great a height in Dublin. This unhappy state of things is so well authenticated by repeated public meetings, and repeated claims on public charity, that it would be quite superfluous to offer further proofs of its existence."

It is well known that the great mass of the humbler population in the district immediately contiguous to this hospital, and from which its wards are principally supplied, have, after suffering the most afflicting distress, been fed for months back from the scanty gleanings of public charity. The Author, however, is far from denying the powerful agency of want and

misery in generating Epidemic Fevers; he has ever regarded those evils, in conjunction with certain moral habits, which he looks upon as their natural and inevitable consequences, to be the chief, *the great*, he would say it emphatically, *predisposing causes* of Fever in this country; but he holds the opinion that these evils alone are incapable of generating Continued Fever in any individual instance, much less in its epidemic form, and that to produce this effect, the combined agency of another set of causes, which, in medical language, we call exciting causes, is indispensably necessary. This latter class of causes will operate with tenfold effect upon an impoverished and enfeebled multitude, when present, but when they are absent, we are instructed by the events of the past year, distinguished at once for an extraordinary immunity from Fever, and extraordinary public distress, that want and misery are incapable of themselves, of producing Epidemic Fever." 7.

Dr. O'Brien next introduces a series of cases from the journals of the hospital, amounting to sixteen, exhibiting, as he expresses it, "a *lively* portrait of the different types of fever which prevail in Dublin." The first four patients present examples of primary gastro-enteritis, "or that disease which has proved a false light to M. Broussais." The fifth case exhibits an example of complication of gastro-enteritis with typhoid fever—and the remaining cases afford illustrations of various types of typhoid fever, "from the mildest to the most intense and malignant form of the disease." We shall give the following general conclusions in the author's own words, as they cannot be abbreviated without injury.

"First.—That there exists a primary Gastro-enterite, attended by a Fever of a peculiar kind, approximating in some respects to the Typhoid character, like all intense phlegmasia of the Gastro-intestinal canal, yet differing from Typhus by some obvious and striking properties.—The following is the train of symptoms peculiar to this disease, viz.—Pain, uneasiness, and generally fulness of the epigastrium, or abdomen, or both aggravated by pressure, and accompanied by headache, nausea, or retching, and, in many instances, by frequent vomiting, particularly after the introduction, even of the smallest quantity of fluid or solid aliment, into the stomach. The appearance of the tongue is peculiar and characteristic; it is either of a vivid or dark red colour, over its entire surface, or it is red at the edges and point, but covered with a dark white fur in the centre, through which specks of red are occasionally visible; the centre, however, is also frequently brown, or even of a yellowish hue, whilst the edges are dark red, as above described, and the papillæ all over the surface unusually prominent; and this organ, on the whole, presents a more striking appearance of irritation and sub-inflammation in this disease than in any other type of Fever.—The pulse is usually deficient in fulness; it is small, frequent, and compressible, and approximates more to the Typhoid than the Synchoid character. It is also accompanied by a lower temperature of the skin; and, in a word, displays none of the signs of that strong re-action, which marks the early stage of Synchus. It is distinguished, however, from Typhus by the comparative mildness of the cerebral affection; the author has, indeed, been frequently surprised at the clearness and integrity of the intellectual faculties, in the midst of that extreme depression of the muscular powers which characterises this type of Fever. This disease is slow and gradual in its access as well as its progress; the patient feels himself ill for some time, affected with a loss of appetite, costive bowels, uneasiness, and occasional twitches

of pain at the epigastrium and in the abdomen, which continue until the febrile movement is developed, when the train of symptoms before described, sets in with all its violence. The progress is also remarkably slow, the disease being frequently protracted to the sixth or seventh week before convalescence takes place. It is further distinguished from Typhus by the absence of petechiæ, a black crust on the tongue, or black sordes of the teeth and gums, which the author has never observed in any of the clearly marked cases of this disease he has witnessed. The bowels are either constipated, or too relaxed, and occasionally these two states alternately succeed each other.—The abdomen is tumid, resisting and tender to the touch, when pressure is employed externally;—the sleep is uneasy, interrupted, and delirious; but when awake, the patient seems to suffer little diminution of his intellectual powers.

As a further proof of the real nature of this affection, it may be stated, that the author has invariably observed that, in proportion as the abdominal symptoms were mitigated or subdued, the affection of the head and the febrile symptoms suffered a simultaneous mitigation or removal. The colour of the skin in this disease is commonly one of the shades of yellow; occasionally the tint is deep and dark, as in the case of Kitts, (No. 1,) where it approached to one of the lighter shades of mahogany.—The intense bright yellow colour of the skin, peculiar to jaundice, and, we presume, to yellow Fever, has not occurred in this Hospital since the Epidemic Fever of 1826; but, from the author's recollection of the cases which then occurred, he is inclined to consider them as modifications of the disease we have been considering.

“Secondly.—The disease now described may be secondary, that is, may supervene on Typhoid Fever, a predisposition being probably formed by previous disorder of the stomach and alimentary canal, functional or organic, or by the prevalence of that epidemic constitution or Malaria which disposes to diseases of the stomach and bowels, as Cholera, Dysentery, &c. This adjunct to Typhoid Fever may occur at an early period of the disease, but it is more frequently observed to accompany the advanced stages.

In those cases, we are taught by numerous dissections made by modern pathologists, that the principal, in many instances, the sole seat of disease, is the lower part of the *ileum*, near its junction with the *cæcum*, which is probably to be attributed to the densely glandular structure of this part of the intestine, and partly, as we believe, also to its inferior situation, which favours the accumulation of acrid secretions in this part. In a disease like Typhus, where the sensibility is greatly impaired, or even destroyed altogether, this affection may exist, without being felt or complained of by the patient; but it will very seldom, indeed, fail to be detected by careful examination externally, or by diarrhœa, or a tympanitic state of the abdomen—which latter are its appropriate signs, when the patient is in a state of *coma* or insensibility. Another of its symptoms, more rare than those above-mentioned, is hæmorrhage from the bowels, which, if superadded to a tympanitic state, presents the most intense and hopeless form of this affection. With respect to the colour of the alvine discharges in this affection, it is stated by Dr. Bright that they are generally ochre coloured; but the author has more frequently seen them of a dark or mud colour—yet he has also frequently observed them as described by Dr. Bright.

Thirdly.—The author is of opinion that there are good grounds in nature for dividing Idiopathic continued Fever into two great classes, which become the foundation of important practical indications, viz.: Inflammatory Fevers (*Synochæ*), and Typhoid Fevers (*Synochus* and *Typhus*); between the first and second of which, as formerly observed of the second and third, various intermediate shades of type occur, the allocation of which to this or that genus or class, it will be difficult to determine. Again, he infers that in the first class (*Synocha*), the Morbific cause of Fever exercises its agency principally over the heart and arterial system, whilst the sensorium and nervous system enjoy a comparative exemption from its influence. Further, that the operation of the Morbific cause in Typhoid Fever is directed primarily and essentially against the brain and nervous system, (including the spinal chord,) and through that system against the heart and arteries, and their capillary extremities. That the various modifications of class and species, arising out of the two great divisions above-mentioned, may depend on specific modifications in the Morbific cause itself, or in the original conformation or constitution

of the individual who is the recipient of the Morbific impression; but that the relation between cause and effect here is as yet far removed from our comprehension. We know, however, that in every case of Typhoid Fever the prominent features of the disease, from first to last, and the character of its symptoms, are nervous, modified by the various degrees of arterial and vascular action by which they are accompanied." 54.

If we examine the first of the two species of typhoid fever (synochus) we shall observe the phenomena to succeed each other in the following order.

"First, a stage of nervous and vascular depression; secondly, a stage of vascular excitement or reaction; and thirdly, a stage of universal exhaustion and debility, announcing a more complete depression of the nervous, vascular and muscular powers than in the first stage. In the perfect Typhus again, the whole series of phenomena exhibit only increasing degrees of nervous, vascular and muscular depression; the power of arterial reaction is annihilated, and the state of the system approaches to that of general paralysis." 55.

This leads our author to a consideration of the physiological condition of the brain itself in this disease. In every case, he thinks, there is a determination of blood to the head, sufficiently manifested by the red and injected eye, the burning forehead, &c. Whether the state of the brain be inflammation or congestion, it is almost needless to inquire, because we do not precisely know what the pathological character of either of these states is.

"We know, however, with certainty, and to this fact, perhaps, our knowledge in every case of inflammation is limited, that the ordinary condition of the brain in Typhoid Fever is that of vascular fulness and distention; but beyond the expression of this simple fact, strict philosophy will not permit us to proceed. Dissection may, indeed, occasionally discover the vestiges of acute inflammation in the brain; but we believe, in the majority of cases, it has failed to detect it. This condition of the brain, the author holds to be consecutive, not primary, in the morbid series, which constitutes the disease, but when once fully established, it becomes itself a new source of morbid actions, re-acting on the sensorial disorder which produced it; and thus, by its direct and reflex influence, producing the characteristic phenomena of the disease. But this condition, which may be called Typhoid Inflammation, may also be propagated to other organs essential to life, as the lungs, stomach, &c.; and we are instructed by dissection, that nearly the whole of the mucous surface, or internal lining of the body, is in a state of vascular distention in Typhoid Fever." 56.

We are not, as yet, sufficiently advanced in the science of the animal fluids to determine what part the blood may play in the generation of fever; but so far as experiments have gone, it has been found but little altered in the first days of the disease.

"We know, however, with certainty, that in a short, but indefinite period after the formation of the disease, the blood and other animal fluids suffer a manifest alteration in their physical properties; and thus, in their turn, become a part of the morbid circle which constitutes the disease." 57.

This is a rational supposition. Our author conceives that the followers of Broussais err chiefly by the indefinite application and the universality of their doctrine, extending it to all classes and species of fever. The following summary of the treatment of fever, founded on seven years' experience in a public institution, we shall give in the author's own words.

SUMMARY.

"The great object of establishing correct principles is to guide us to a safe and successful practice, to rescue the victim from the grasp of death, and restore him to health; this is the end of all our reasonings, our labours, our anxious solicitude. But, alas! have we arrived at that point of certainty in our principles, that would enable us to rely on them with confidence as fixed rules of practice?—Can he who contemplates the divisions which embarrass the science of Pyretology, the numerous theories, and conflicting opinions, which distract its cultivators, lay his hand to his breast and say, that any theory of Fever, which has hitherto been proposed, furnishes a principle, which he would at once apply without fear and hesitation to the treatment of fever? However partial he may feel to the views, a miniature of which, he has endeavoured to lay before the reader, the author is compelled by truth and candour to declare, that he would answer in the negative.

There is no part of the philosophy of Fever, if I may use the phrase, which has been treated with more levity, and disregard of the strict rules of induction than its treatment; and yet this is the most important of all, the great problem to whose solution all our researches are directed. This is the grand error of speculative and theoretic reasoners; they first form their principles, and then deduce the practice, and too often apply it without hesitation or remorse; whereas, strict philosophy requires that they should first establish the practice, and afterwards deduce the principles.—In fine, our proposition is, that every man should form his practice, not from preconceived opinions, not from delusive theories, but from a multitude of facts and experience.

Let the advocate of primary inflammation, who commands us to abstract sixty ozs. of blood in the first stage of Typhoid Fever, first bring forward his individual cases, numerous and authentic, in confirmation of the success of this practice, and then if we are satisfied with their number and authenticity; if, in fine, they stand the test of rigorous examination, we shall admit that he is warranted in his conclusions to the extent of his experience. But we should afterwards take care to make a minute comparison of that experience with the experience of others, and with our own. The patrons of Humoralism on the other hand, we would address in a similar strain, and entreat them to bear in mind, the uncertainty, to say the least of it, of this doctrine, and to recollect, that where human life is the subject of experiment, and must be the sacrifice of error, ambiguous principles should never become the basis of practice.

The author shall now proceed to state the result of seventeen years' experience in the treatment of Fever, in that Hospital whose report he now writes.

The primary Gastro-enterite is rarely a fatal disease, I mean in its ordinary form of prevalence in Dublin. In its mildest varieties are included all those cases of mild Fever which are commonly attributed to indigestion and disordered bowels, and which are the peculiar plague of infancy and childhood.

These complaints are, for the most part, easily removed by removing the irritation which produces them, that is, by unloading the alimentary canal of its acrid contents, which is best effected by a few gentle purgatives, among which a small dose of calomel or some other mercurial will generally be necessary. In the severer forms of the disease in which M. Broussais, we think, with justice includes 'delirium tremens,' the most efficacious of all remedies, according to the author's experience, is local or capillary blood-letting. Occasionally, when the accompanying Fever assumes the Synchoïd character, the author commences his treatment by taking twelve or fourteen ounces of blood from the arm; a measure which will also be generally advisable, when the pain of the epigastrium and abdomen are very acute, and increased by slight external pressure. The remainder of the treatment may be conducted by the repeated application of leeches to the epigastrium, or abdomen, according to the nature of the case, until all pain and tension be removed. As the number of leeches at each application may be considered a point of importance, it may

be stated that the maximum number in the first four cases recorded above, and which were cases of great severity, was twelve at each application; and even from this number (which some will probably consider too small), the author has invariably found a decided benefit. After the leeches, it is usual to apply warm stupes or an emollient poultice over the part most affected. Next in efficacy to local blood-letting, we would place laxatives;—irritating purgatives are not applicable here, though we by no means sympathise in the horror which the disciples of M. Broussais entertain against this class of medicines, reasoning, not from experience, but from the prejudices of theory;—indeed we entertain little doubt, that as the disease is frequently produced by the omission, so it is protracted by the neglect, or fear of purgatives.

Rhubarb and manna were the favourite purgatives of Roederer and Wagler, and accordingly we believe the infusion of rhubarb and manna to be, by its mildness and efficacy, well suited to this disease. In hospital practice we use small doses of castor oil and tincture of rhubarb, or more frequently rhubarb alone, suspended in some aromatic vehicle. A pill composed of rhubarb, Dover's powders, and a moderate quantity of the *hydrargyris cum creta*, or of blue pill, is a combination which the author frequently employs in this disease, and which he has found to fulfil the indications required in this complaint of a soothing and mild laxative.

The next class of medicines applicable to this disease is mercurials, and of these the particular form which we prefer is calomel and opium. This medicine has been found often successful in allaying irritation of the stomach and vomiting, when means above recommended had failed in producing this effect. The author has not tried mercurial friction, but he has no doubt that particular cases may occur in which this may be the most advisable mode of administering the remedy. Whatever form of mercury is used, it will be necessary to carry it to the extent of a slight salivation, before the full effect is produced. One of the most distressing symptoms in this complaint is nausea and vomiting, which incessantly harass the patient. When the measures above pointed out have failed to remove this symptom, we have applied a mustard poultice or a blister to the epigastrium, which have seldom failed to remove it. In those cases Dr. Bright recommends the *carb. magnesic* internally, and small draughts of soda water, with a tea-spoonful of brandy. When the inflammatory symptoms have removed or mitigated, we consider opium as a medicine of considerable value in this complaint. In the case of an esteemed medical friend, (himself an experienced Physician,) whom the author attended, while labouring under a very protracted form of this disease, it was thought advisable to administer opium to allay abdominal pain and irritation, and the Acetate of Morphia was selected as least likely to disagree with the stomach;—so decided was its effect, and so prompt and permanent the relief, that the gentleman assured my colleagues in attendance and myself, 'that we had hit upon the true remedy at last.' When however, Diarrhœa becomes a prominent symptom of the disease, opium, or any other medicine calculated to constipate, should be administered with caution, as we consider moderate diarrhœa a sanative process in the inflammations of the gastro-intestinal mucous membrane. In such cases our object is to moderate, not suppress this discharge; and for this purpose we have found Dover's powders and rhubarb one of the best remedies, in conjunction with gummy and mucilaginous diluents. Secondary inflammation of the mucous or serous structures of the lungs are by no means an unfrequent complication in this disease; of which examples occur in the cases of Somers and Duffy, above described. Such cases are to be treated according to the ordinary method by general blood-letting, if the strength of the patient permit; but if not, by the local abstraction of blood, blisters, and expectorants, as ipecacuanha, squill, &c. Such is the mode of treatment which had been adopted in the cases above described, and they recovered under very unpromising circumstances.

The secondary Gastro-enterite which supervenes on Typhoid Fever, is to be treated in the manner now described with respect to the primary disease, with the exception of general blood-letting, which is never admissible; the disease must be encountered, in this case, by the repeated application of leeches, laxatives, and mucilaginous diluents, and the other remedies above described. Of hæmorrhage from the bowels, we have one example in the cases above detailed, and it is by no means an infrequent occurrence in this form of the disease; it is even common for slight hæmorrhage to continue after the fever has disappeared, and to protract the convalescence beyond its natural peri-

od. In all the cases of this description which occurred in the author's ward, the means above described were attended with complete success." 63.

The author then approaches the last and most difficult subject of investigation—the general treatment of typhus fever. This he first considers abstractedly from its complication with various inflammatory affection—secondly, in relation to those complications themselves. Dr. O'Brien adverts to the three stages of typhoid fever—nervous depression—arterial excitement—final exhaustion. The following critique on Dr. Smith is deserving of a place here, as it bears on some observations made by ourselves in the review of Dr. Smith's work.

"Suppose a patient presented to us in the first stage, that is, in the first two or three days of Fever, with a pale shrunk countenance, a shrivelled skin, a general feeling of coldness, a heavy and dejected air, a faltering voice, head-ache, anorexia or nausea, or vomiting—what is to be done? Bleed, says Dr. Smith, bleed to sixteen ounces, and bleed again and again 'to the subdual of inflammation.' The marks of inflammation are as yet, however, indistinct, and inflammation itself is not yet developed, according to Dr. Smith's own ideas of the theory of Fever, which perfectly accord with ours. Besides, the only external signs we can ever have of an internal inflammation are Pyrexia and pain, and the latter of these is frequently absent in Fever; and the former, Dr. Smith informs us, and we cordially agree with him, can never be cut short by a stroke of art. We fear, therefore, that as a practical canon the subdual of inflammation is one of vague and uncertain application. It is true, indeed, that pain of the head is most generally present, but we apprehend that no means which fail in removing Pyrexia will succeed in banishing, that is completely, head-ache. Again, in this stage of Fever we really possess no positive means of distinguishing, *a priori*, the mildest from the most intense and dangerous types of Fever; but here we are obliged to apply the same canon to all." 64.

Dr. O'Brien conceives that large detractions of blood in the incipient stage of fever accord only with that doctrine which supposes inflammation to be its primary and essential cause. With Dr. Smith's theoretical principles, Dr. B. accords—he only differs from him in the extent to which blood-letting should be carried in the incipient stage of fever—"an extent neither consonant with Dr. Smith's own theory, nor supported by sufficient evidence." The following is Dr. O'Brien's practice in typhoid fever unmixed apparently with topical inflammation.

"In the first stage of Fever, the author's practice is merely palliative; he is satisfied with administering a moderate emetic or purgative, enjoining rigid abstinence and confinement to bed; if possible, a warm bath, and he waits a little until a further development of the disease shall have given a probable insight into its nature and type. As soon as re-action has commenced, if it be vivid, and accompanied by increased heat, flushed countenance, frequent and full pulse, blood-letting is then resorted to.—A single venesection of ten or twelve ounces is at first practised, and if this prove insufficient to reduce the pulse, the heat

and flush of the skin, and the general excitement, the process is repeated; but beyond this, unless under very peculiar circumstances, the author seldom thinks it safe to proceed. Occasionally, though certainly rarely, a single bleeding, as above, has brought the Synchoid stage of this Fever to a conclusion, and rapidly converted it into the Typhoid. This transition is well illustrated by the Case of Farrel, No. 15, above recorded. When this patient was first presented to the author, his Fever was of a strongly marked Synchoid character, with strong and full pulse, flushed countenance, burning skin, and head-ache. He was bled immediately to the amount of ten ozs., and a weak solution of tart. emetic was administered. On the following day, the author was not a little surprised to find his pulse irregular, small, weak, and frequent, his skin of a dusky hue, and covered with large petechiae; his countenance muddy and Typhoid; and his intellect, which the day before was perfect, now much impaired.—This patient ultimately recovered, after a protracted and doubtful struggle. Another illustration will show the uncertain and versatile character of the disease we are considering; in the next bed to Farrel, and admitted on the same day, lay a patient named Ryan, nearly also of the same age. The symptoms and general appearance of the two patients were so strikingly similar, that they made a strong impression on my mind; they were treated of course exactly in the same manner; but what was the event? On the following day Farrel was found in the state above described, and Ryan was convalescent. In the month of December, 1829, a patient named Reilly, a grocer's clerk, young, was admitted into the author's ward; with him a note was sent to the Hospital addressed to the apothecary, from a Medical Gentleman, who attended him previous to admission, stating that he had been bled to sixteen ounces, and that the blood was buffed and cupped. His case wore the Synchoid character, but his head was not yet materially affected; and he was bled again by my direction to twelve ozs.;—on the following day I found him in a paroxysm of inaniacal delirium, the most violent I ever witnessed; yet, with a pulse so small, weak, and irregular, that general bleeding could not again be hazarded. This patient was treated by the repeated application of leeches to the head and by the cold affusion; and after a phrenzy of nearly three days' continuance, perfectly recovered from a Fever, which, though marked by symptoms far more violent, was not half the length of Farrel's Fever, before mentioned. I adduce these Cases to show the infinite variety of forms this disease assumes, and the fallacy of conclusions drawn from particular cases; they will also serve to illustrate the author's practice in the Synchoid stage of Synchus. His mode of applying the cold affusion to the head is as follows:—The patient is supported by one or two nurses, while his head projects beyond the bed, over a pail or tub placed near its side, another assistant then pours a stream of cold spring water from a considerable height on the crown of the head, previously shaven and denuded, from a large ewer or jug.—The shock is very powerful, and some caution even will be necessary, to prevent the respiration from being suspended. Dr. Smith recommends another mode of applying the cold affusion, which is still more powerful, but less convenient; namely, the patient being seated in a large tub near the bed-side, a man standing on a table by the side of the tub, pours from an elevation as high as his arm can reach, a full stream of cold water out of the pipe of a watering-pot, deprived of the rose, on his naked head. If this mode of applying the cold affusion be adopted, we should think it would add to its efficacy to immerse the patient's feet in warm water. The next class of medicines available in the Synchoid stage of Fever are purgatives and diaphoretics; the ordinary purgatives are castor oil, or infusion of senna and sulphate of magnesia. The author seldom uses calomel as a purgative, a little influenced, he owns, by the clamour of the French writers against irritating purgatives;—calomel, however, is very generally employed in minute doses, in combination with antimonial powder as a diaphoretic; thus, a grain or half a grain of calomel, with two grains of antimonial powder are given on the days in which purgation is omitted, twice or thrice; whether this combination produces its salutary effects, by acting on the skin, or by improving the secretions of the alimentary canal, the author cannot determine; but he has invariably found it a useful medicine. In cases, however, of abdominal irritation, it seems inapplicable, and ought to be withheld." 68.

We need not dwell on the stage of exhaustion in the typhoid fever. Dr. O'Brien's practice is one rather of vigilant observation than of active treatment. Generally speaking, however, "it is tonic and moderately stimu-

lant." Gentle laxatives, blisters, &c. are employed; but wine and opium have not answered his expectations, and on them he places little or no reliance.

We must now close our analysis of Dr. O'Brien's report. It is valuable, as proceeding from an institution where experience, on a large scale, forms the basis and affords the data.

XII.

PRACTICAL OBSERVATIONS ON LEUCORRŒA, FLUOR ALBUS, OR WEAKNESS, WITH CASES ILLUSTRATIVE OF A NEW MODE OF TREATMENT. By *George Jewel*, Member of the Royal College of Surgeons, one of the Accoucheurs to the St. George's and St. James's Dispensary, &c. Svo. 1830.

OUR readers are aware that, in our 24th Number, page 517, et seq. we gave an account of Mr. Jewel's paper on the use of nitrate of silver in leucorrhœa, as published in the Medical and Physical Journal, for October, 1829. The present essay is an amplification of that paper, including some additional experience, and a more systematic investigation of the subject.

The first and second chapters of the present work are dedicated to the pathology of leucorrhœa. The popular opinion, no doubt, is, that leucorrhœa proceeds from debility, whether local or constitutional. This opinion is countenanced at least, if not supported, by medical authorities. Dr. Clark, when speaking of the transparent mucous discharges, unaccompanied by change of structure, classes such affections under two heads—namely, those which originate from, or are accompanied by, increased action in the vessels of the part, and others which arise from debility. Mr. Burns has given an opinion somewhat the same, and so have many other authors.

"A minute pathological inquiry must, I think, lead to the conclusion, that local irritation, determination, or inflammation, is the immediate exciting cause.

Whilst some writers have insisted on leucorrhœa being always a local disease, having its seat, for the most part, in the uterus or vagina; others have maintained it to be symptomatic, having its origin in general functional disturbance of the system. To this, not by any means unimportant part of the subject, I have directed my attention, in order to discover which opinion was entitled to credit; and I have been led to the belief, that the vaginal discharge is commonly the result of some direct local stimulus. That cases do occur, which seem to depend upon a disordered state of the digestive organs, or disturbance of the general health, is obvious; but this altered or relaxed state of fibre, is one which particularly predisposes to local inflammation, or congestion. BATTIN, however, who has written upon

this subject, makes his eighth species of the disease, 'leucorrhœa from indigestion ;' whilst PEARCE commences his classification with the 'constitutional' variety. It is not unusual for a female to have excessive leucorrhœal discharge accompanied by great disturbance of the system. Vertigo, a preternatural heat of the surface, a coated tongue, thirst, and a full pulse, are the symptoms which often accompany, and sometimes precede, the vaginal discharge ; when, after a few days of active purgation, and a strictly vegetable diet, all the symptoms, together with the discharge, entirely disappear. Here it must be evident that the uterine vessels partake of the general plethoric state, or disturbance of the system." 4.

Dr. Dewees has divided vaginal discharges into three classes—one (the leucorrhœa of direct irritation) following inflammation of the mucous membrane of the uterus or vagina, produced by some local cause, as laborious parturition, irritating substances applied to the surface of the vagina, &c. Secondly, the "leucorrhœa of remote irritation," in which are ranged all those instances in which the vagina sympathises with some other organs or structures of the body, as with the uterus during pregnancy, or with the same in long-obstructed menses—with the rectum when irritated by hæmorrhoids, &c. Under the third head (the leucorrhœa of habit) he includes those instances of the discharge, which continue after the active or inflammatory condition of the parts has ceased ; as after syphilis or gonorrhœa has been cured, a prolapsed uterus restored, &c. It is evident that Dr. Dewees considers the disease as almost invariably of local origin.

"Every protracted or severe case of leucorrhœa, will be attended by a great functional disturbance, an interrupted digestion,* a pallid and leucophlegmatic countenance, scanty and irregular menstrual evacuations, a morbid sensibility of the nervous system, oppressed respiration, and exhaustion of the vital powers. It will produce, in short, a variety of anomalous complaints ; not unfrequently a remarkable coldness of the feet and legs, and prolapsus, or falling down of the womb, and sometimes prevents conception from taking place. Such are the common effects of profuse vaginal discharges ; and hence will appear the difficulty, in the more advanced period of the disease, of distinguishing between cause and effect. The various dyspeptic and other symptoms, which sometimes prove so distressing to the patient, I conceive are, for the most part, secondary or sympathetic, and consequently, if we succeed in removing the local disease, these will gradually disappear. It would, however, be injudicious to direct the attention wholly to the one, to the neglect of the other. It has been well observed by an able writer, that an idiopathic and organic affection of some part may co-exist with disorder of the general health, and that which was a mere functional complication in the beginning, may become organic disease in the sequel." 7.

As to the actual seat of the disease, much diversity of opinion has, as usual, obtained. Cullen, Leake, Hamilton, Sylvius, Astruc, &c. seem to think the leucorrhœal discharge issues from the same vessels that furnish the menstrual secretion. Mr. Jewel believes that this discharge seldom issues from the uterine cavity. The uterus is no doubt lined by a mucous membrane, and, like all other tissues of that kind, may occasionally throw out a superabundant quantity of mucus, or even pus.

* "Le dérangement des digestions accompagne constamment leucorrhée constitutionnelle."—GARDIEN.

"By attending to the following circumstances, we shall, in some cases, be able to ascertain whether the discharge issues from the uterine cavity, or not. When the seat of the disease is in the vagina, or cervix of the uterus, the discharge commonly appears during the night, notwithstanding the patient is confined to the horizontal position, but if in the cavity of the womb, it is generally suspended: a piece of sponge, therefore, being introduced into the vagina at bed-time, will occasionally determine the question; for if the discharge issues from the surface of the vagina, it will become saturated with it. This test, it must be admitted, is not implicitly to be relied on; although, by being often repeated, it may throw considerable light upon the pathology of the disease. The discharge issuing from the cavity of the womb, so completely deranges the functions of this organ, that in almost all cases it renders the female incapable of conception. A purulent discharge, the result of active inflammation in the mucous lining of the uterus unconnected with parturition, is not common in its occurrence.

Some writers, who seem to have devoted a good deal of attention to female diseases, state that most leucorrhœal discharges arise from the mucous surface of the vagina. Dr. DEWEES has declared his belief that it consists in an altered action of the vaginal lacunæ, or glands, which furnish, in a state of health, the moisture so important to the part; and Mr. BURNS imagines that the most ample and most frequent source is from the vagina.

It must be admitted, that a great pathological difficulty sometimes arises, in deciding upon the tissue or part which has been morbidly excited; but it is fortunate, that in the majority of cases, the local habitation of the disease is of limited extent; and I may add with confidence, that we possess a remedy which, if judiciously employed, will generally effect a cure, even under most unfavourable circumstances." 11.

Three states of conditions, Mr. J. observes, are requisite for the production of leucorrhœa—irritation, congestion, inflammation of the subacute or chronic kind. NAUCHE in France, and GOOCH in this country, have separated irritation of the uterine system from inflammation of the same. Mr. JEWEL does not quite accord with Dr. Gooch, in his definition of IRRITABLE UTERUS—namely, a painful state of that organ, neither attended by, "*nor tending to produce a change in its structure.*" This, he thinks, is a bold assertion, since unhealthy action, if long kept up in a part, may eventually produce "a decisive morbid change." When we consider how long the most painful affections, for example, neuralgia, will go on without any appreciable alteration of texture, we cannot question Dr. Gooch's definition. Besides, although it is probable that leucorrhœa may be attended with chronic inflammation of the parts, it does not follow that a painful or irritable uterus should be attended by the same. Pain may and does exist, quite independent of inflammation. Mr. JEWEL introduces a long extract from Dr. Gooch, on irritable uterus, for the purpose of making a pathological distinction between irritable uterus and leucorrhœa.

"First in reference to the pain experienced by the patient, when pressure is applied over the pelvic region, and the absence of leucorrhœa, as indicative of the body of the uterus being the seat of the disease; and secondly, the presence of a copious vaginal discharge, at first thin and transparent, then becoming thick and opaque, as indicative, either that the morbid action is limited, or has extended, to the cervix uteri.

The sequelæ of this irritable state of the uterus, and its contiguous parts, are great depression of spirits, languor, palpitation of the heart, hysterical and other nervous sensations, in all their Protean shapes." 18.

We shall now introduce a case to shew Mr. Jewel's practice in this troublesome complaint.

"Case 1.—S. J. ætat. 49, residing in Bridle Lane, admitted a patient under my care at the St. James's Dispensary, on the 10th of June. She is the mother of fourteen children, exclusive of two abortions, and has, during the last twelve months, been subject to profuse catamenia, and excessive leucorrhœal discharge of a yellowish colour. She has pain in the loins, shooting in paroxysms through the region of the uterus, in which there is also a sense of fulness and throbbing. She complains of great languor, with loss of appetite and uneasiness at the pit of the stomach. She is frequently attacked with the globus hystericus, and disturbance about the head, and says that a flow of tears affords her much relief. Pulse 85. Bowels confined.

Ten ounces of blood to be abstracted from over the sacrum by cupping.

R. Magnes. Sulph. ʒvj.

Infus. Rosæ . . ʒvijs.

Acid. Sulph. dil. ʒj. M. ft. Mist. cujus sumantur

Cochlearia duo vel tria ampla, mane, quotidie.

R. Argent. Nitrat. gr. xij.

Aq. distill. . . ʒvj.—M. ft. Injectio.

14th. During a period of twenty-four hours after the cupping, she felt extremely faint and sick, and now complains of increased languor. Says she has used the injection regularly, notwithstanding the presence of the catamenia, and that it occasioned no degree of pain, except a little smarting, the parts having been for some time in an irritable state.

To omit the aperient medicine.

The strength of the injection to be increased from grs. ij. to grs. iv. to the ounce of water; and to take a pill, containing five grains of the extract of hyosciamus and half a grain of opium, at bed time.

18th. The sanguineous discharge has ceased, having continued only a week, its usual period being from ten days to a fortnight. The leucorrhœal fluid has its usual period being from ten days to a fortnight. The leucorrhœal fluid has become 'white and thinner than it has been for several months.' The local pains are greatly relieved, but she still complains of occasional heat and throbbing about the womb.

To continue the injection.

22d. The leucorrhœa has ceased, and the local heat and pains have almost left her.—There is still great languor and loss of appetite.

R. Infus. Rosæ . . . ʒvijs.

Sulph. Quinin. . . ʒj.

Tinct. Card. comp. ʒss.—M. ft. Mist. cujus sumantur

Cochlearia duo ampla ter die.

To continue the injection.

26th. the vaginal discharge has not re-appeared. Her spirits are better, and the appetite improves.

Continuentur remedia.

30th. There is no leucorrhœa. Her general health continues to improve, and she intends to go into the country in the course of a few days. Discharged cured." 21.

This discharge often appears immediately before and after the menstrual period—and only at such times. This, he thinks, may be accounted for on the principle of congestion. A congestive state of the utero-vaginal vessels, however, he generally attributes to irregularities of diet and to sedentary

habits. Mr. Jewel confidently avers that, whether the disease under consideration proceed from morbid sensibility, congestion, or irritation of the parts, the nitrate of silver will be equally efficacious in remedying the malady.

"From a strict pathological investigation into the numerous cases of leucorrhœa which have fallen under my observation, I have been induced to believe, that when the morbid secretion is abundant, and the local symptoms severe, one uterine affection gives rise to the disease more frequently than any other, namely, a sub-acute or chronic inflammation of the cervix uteri. Even when the vaginal surface appears to have been the tissue primarily affected, we shall find, in almost all protracted cases, the cervix uteri also seriously involved in the mischief. Mr. Burns, an authority which cannot be quoted without respect, alludes to this part of the subject by observing, 'that when the discharge is very opaque, and attended by considerable pain in the back and loins, there is reason to think that the cervix uteri is in a state of irritation; and by examination may be found tender to the touch, and the mouth soft and enlarged a little. This state does not constitute disease of structure, though it may lead to it, but it consists merely in an affection of the glands. After the tender state is nearly subdued, and the discharge has become more chronic, the cold bath, tonics, and astringent injections are proper.' Here it is evidently meant that, as long as the tender state of the cervix uteri continues, we ought not to employ those means which are usually had recourse to, with a view of giving tone and vigour to the system, which, in fact, is an admission of the inflammatory character of the disease. I have scarcely ever seen an instance of profuse leucorrhœa, without more or less tenderness of the cervix uteri. I have also reason to know that very many of such cases are mistaken for carcinoma uteri, and that, in consequence, no remedies are prescribed, or a very inefficient mode of practice is adopted. It may be difficult, it is true, in some cases, to discriminate between a chronic inflammatory affection of the cervix uteri, and incipient scirrhus disorganization. The following remarks will, probably, assist the young practitioner in his diagnosis:—This inflammation of the cervix uteri, like scirrhus, or any organic disease of the uterine system, attacks occasionally at the period of life when the catamenia are about to cease, but I have more frequently found it to exist in married females, from the age of twenty-six or twenty-seven to that of forty, and I have recently seen several cases occurring in young married females, within three months after the birth of the first child. The local symptoms in both diseases, are very nearly allied. There will be occasional lancinating pains through the region of the uterus, with a constant dull kind of pain about the inferior portion of the sacrum, the hip or groin, attended by an irritable bladder, or frequent desire to void the urine, and, in some severe instances, by tenesmus, and pain within the vagina when in the sitting posture. The vaginal discharge is commonly of a milky or cream-like colour, now and then having a glutinous consistence; and is often, in the more acute cases, mixed with a dark-coloured or grumous secretion. Menstruation, if not interrupted by lactation, may be resumed with its usual regularity, although, after a time, some deviation takes place: generally, in the first instance, by its continuing several days beyond the accustomed period. I have remarked that, although the local pains are not unfrequently increased in severity at the commencement of menstruation, a great relief is afforded as soon as the catamenial secretion becomes more abundant. Upon making an examination per vaginam in this disease, the os uteri will not be found opened to the same extent as in scirrhus, (an exception may be made in the case of a woman who has had a numerous family,) nor will its margin present the same cartilaginous hardness to the touch. The pain does not appear to be situated in the edges of the os uteri, as described by some authors, but in the cervix, as pressure upon this part alone occasions the patient to complain. The uterus will be found projecting lower in the vagina than natural, but this will depend upon the nature of the disease; the more acute, the further it will have descended. It should be recollected, that prolapsus uteri is a very common effect of protracted leucorrhœa, when, in addition to the symptoms already enumerated, there will be fulness about the pudendum, or weight on the perineum, and a dragging sensation about the loins, with difficulty in avoiding the urine, and sometimes extreme pain in coitu, whilst the discharge will be frequently tinged with blood. These symptoms become modified or severe, according to the degree of descent which has taken place, or the excitability which exists in other and distant organs; hence, in a case of simple relaxation, there will oftentimes be merely a sensation of weakness, and fulness about the pubes, with an increased,

but mild, mucous discharge from the vagina. I have seen several cases of prolapsus uteri, in their incipient state, most effectually relieved by the application of the means hereafter named." 29.

Inflammation of the mucous membrane of the vagina—"an important cause of leucorrhœa"—may be acute or chronic—the latter being the most common and the most insidious. One of the first symptoms, he observes, is often an increased secretion of thin mucus, unaccompanied by pain or irritation. The progress, however, of the disease, is marked by a sense of itching or burning, with occasional swelling about the labia. As the complaint advances, the vaginal secretion changes in consistence and appearance, becoming thicker, and staining the linen of a yellow colour—or assuming a brownish hue, when it is usually offensive. The glands of the groin seldom enlarge, nor is there usually much ardor urinæ, unless the discharge be extremely acrid, the vaginal surface highly sensible, or excoriation exist. After the subsidence of these symptoms, which may continue for a longer or shorter period, the patient complains of languor and debility—looks pale, with want of animation in the countenance, and a dark semi-circular appearance under the eye. The digestive functions become much disturbed, and some degree of uneasiness with distention is usually complained of in the stomach.

"Inflammation of the mucous surface of the vagina may arise from any of those causes which produce the same action in other textures, and which may be classed under two heads:—general and local excitement. The circumstances which induce the former state, may be considered as follows; namely, a high nutritious diet, and the free use of wines, spirituous or fermented liquors; violent exertions of the body, such as dancing; pyrexia, or fever, and exposure to cold. In short, such complaints may arise from any unnatural activity in the vascular or nervous systems. Among the various local causes, may be noticed, difficult parturition, blows, the lodgement of extraneous bodies, as a pessary or piece of sponge, too frequent coition, &c.; whilst misplacements of the uterus, or its various diseases, such as schirrus, hydatids, polypus, &c. will commonly produce irritation and inflammation, with a discharge of unhealthy mucus from the vagina. Local excitement, either in the vagina, or neck of the womb, or both, is often produced by hemorrhage, or abortions. Painful menstruation, in which there is commonly congestion of the uterine vessels, will occasionally be preceded and followed by an increased secretion from the mucous membrane of the vagina." 38.

M. Blatin examined the bodies of 24 females who died from excessive leucorrhœal discharges, with the view of ascertaining the seat of the disease. In nine of these cases, the morbid secretion was found to arise from the uterus—in thirteen, from the neck of the uterus and vagina—and in two, from the fallopian tubes. A mucous discharge is not unfrequently discovered to arise from excoriations about the nymphæ—a species of the disease purely local, and for which Mr. Jewel thinks the nitrate of silver peculiarly adapted.

This brings us to the 3d chapter of the work, treating of leucorrhœa in children—in pregnant women—and at the "TURN OF LIFE."

Mucous and muco-purulent discharges are very apt to occur in children, in consequence of dentition, want of cleanliness, exposure to cold, &c. attended with ardor urinæ, inflammation, excoriation, and other troublesome symptoms. Again, in females about the age of puberty, the regular action of the uterus is prevented by leucorrhœa.

"In the treatment of vaginal discharges in children, the strictest cleanliness ought to be observed, as the secretions so soon become acrid. The parts should therefore be washed carefully with a little tepid vinegar and water, (or if this wash should occasion pain, milk and water may be substituted,) and wiped perfectly dry, at least twice a day. It often happens in young children, as well as in females arrived at the age of puberty, that there is a preternatural fulness in the system, indicated by head-ache, thirst, and a quick hard pulse; in which case, active purging, or blood-letting, should be premised, to diminish arterial action, before the nitrate of silver, or other local remedies are employed. It is only necessary to add, that the uterus seldom takes on its regular and healthy function, until the leucorrhœa be removed: an object which, in most instances, may be accomplished, by attention to the rules laid down in another part of the work." 43.

From the many instances of this discharge which we have seen in female children, and all readily giving way to cleanliness and common astringent injections of the sulphate of zinc, we cannot but consider the use of the nitrate of silver as, at least, unnecessary in nine cases out of ten of such affections. Mr. Jewel himself cautions us not to be too free with the nitrate in the leucorrhœa of utero-gestation. It has been remarked by Denman, that those females who suffer most from this complaint, have easiest labours. Our author saw one remarkable illustration of this maxim, but is not prepared to say that the rule is absolute. In general there is a state of local repletion induced by pregnancy, and Mr. Jewel thinks that, as the leucorrhœal discharge acts as a depletion on the internal organs, it ought not to be suppressed until the congestive state of the uterine system be first removed. One thing ought to be attended to strictly—frequent ablutions during labour to prevent the infant from being affected by leucorrhœal ophthalmia.

In respect to the profuse leucorrhœal discharge which sometimes occurs about the cessation of the catamenia, it must be looked upon with suspicion of structural disease. To secure a female from those ailments which occasionally shew themselves about the TURN OF LIFE, the diet should be regulated, and exercise enjoined. The usual obesity which occurs about this period renders females little inclined to coporeal exertion. Depletion is often necessary at this critical conjuncture, to relieve the plethora of the venous system.

"There is one symptom, the effect, in most instances, of the acriminous quality of the discharge, which is oftentimes excessively harassing, namely, pruritus, or itching of the parts; and it is one which demands the attention of the practitioner, inasmuch as it not unfrequently indicates disease of the organs within, as of the uterus, bladder, &c. It appears to arise from the lodgement of the irritating secretion in the vulva, or vagina. I am of opinion, that pruritus rarely comes on, without there being an acrid vaginal secretion, or an efflorescence upon the internal surface of the parts, although it may be so trifling as to escape the observation of the patient herself. A lady who had laboured under incessant pruritus, with a slight leucorrhœal discharge, for a period of four months, was completely restored, by injections of the solution of the nitrate of

silver. Dr. Dewees, by whom the aphthous efflorescence above alluded to was first brought to the notice of the profession, recommends, in strong terms, for the cure, a solution of borax in water, both as a wash and as an injection. An injection of the liq. ammoniæ puræ, in the proportion of a tea-spoonful to a pint of water, has been found useful; but I would place the greatest reliance upon injections of the solution of the nitrate of silver.—Blood-letting, local or general, together with a low vegetable diet, will be essentially necessary to the cure of the complaint, although I have seen more than one obstinate case yield, in the course of a few days, to the injection last named, without any other aid." 56.

The 5th chapter of the work treats of the predisposing and exciting causes—the influence of seasons—of a contaminated atmosphere, &c.

Among the most common of the predisposing and exciting causes, Mr. Jewel reckons a scrofulous diathesis—irritable nervous system—derangement of the menstrual secretion—frequent parturitions or abortions—protracted lactation, &c. Mr. J. accords with Leake and some others, that leucorrhœa prevails more in the Autumn than in any other season of the year. Moisture and cold unquestionably predispose to the disease. The impure atmosphere of large cities and crowded apartments conduces much to the propagation of the malady.

The sixth and last chapter is on the treatment of leucorrhœa. Our author, as may have been anticipated, "places the most perfect reliance on the nitrate of silver," while he is anxious to impress on the attention of practitioners, the necessity, in all cases, of adopting what may be termed general principles. The state of the general health, therefore, and that of the circulation, should be examined into. Upon these points we need not dwell. Mr. Jewel thinks that more harm than good is done by cold sponging the loins, so often had recourse to, with or without advice. He prefers a tepid ablution consisting of one part of vinegar to two of water. The cold bath is often hazardous, where the patient is enfeebled by the discharge, easily put out of breath, and whose digestive organs are disordered. Of the lytta Mr. Jewel does not seem to entertain much opinion. Astringent injections, he observes, have very generally failed to cure this complaint.

"There is one medicine which hitherto has been employed upon a very limited scale in leucorrhœal diseases, but which, I have every reason to believe, is peculiarly adapted to assist in their removal. I allude to iodine. The efficacy of iodine over the absorbent system is now so completely established, as scarcely to require further comment; indeed, it may be stated, without fear of contradiction, that we have no article in the materia medica, possessing more influence over, or so capable of producing such extraordinary and important changes in the glandular parts of the body, as this medicine. Its effects upon the uterine system in particular, in almost all the cases in which I have employed it, have been marked and decisive.

I may here notice a case of diseased ovary, in which this little, but important, organ had morbidly increased to the size of the fetal head. The general and visceral disturbance occasioned by its presence in the pelvic cavity, had become so distressing, that the patient, notwithstanding the fatality of an operation had been represented to her, often expressed an earnest desire to have it removed. After various means had been employed, without any beneficial result, she was put upon a course of iodine, commencing with ten drops of the tincture three times a day, gradually increasing the dose to thirty-five. She has been under the influence of this medicine about ten weeks, and at the present time, the tumour is scarcely to be felt. She has suffered nothing from such large doses of the medicine, but,

on the contrary, her spirits are greatly improved, and she anticipates, with great confidence, a perfect restoration to health. Dr. Thomson, the able professor of materia medica, at the London University, has related a case of ovarian dropsy, in which, after the woman had been tapped in the usual manner, and seven quarts of albuminous serum, mixed with pus, removed, iodine was administered, and carried to the extent of thirty-six drops of the tincture three times a day. The result was, that the tumour wholly disappeared, and the woman was perfectly restored." 80.

The mode of applying the nitrate of silver is detailed at length in our 24th No. p. 517, and therefore we need not reprint it here.

Under the head of gonorrhœa, Mr. Jewel informs us that the nitrate of silver is as effectual in that complaint as in leucorrhœa. The use of this remedy is not new in gonorrhœa, as it was very commonly employed, to our knowledge, by our naval surgeons during the late war. In females we find that Mr. Jewel employs the nitrate in the proportion of three grains to the ounce of water.

We return Mr. Jewel many thanks for the perusal of his little volume, which contains much judicious observation, with the open and liberal communication to his brethren of a remedy which promises to be of considerable service in a troublesome and obstinate complaint.

XIII.

I. ON THE RECENT IMPROVEMENTS IN THE ART OF DISTINGUISHING THE VARIOUS DISEASES OF THE HEART, BEING THE LUMLEYAN LECTURES DELIVERED BEFORE THE ROYAL COLLEGE OF PHYSICIANS IN THE YEAR 1829. By John Elliotson, M. D. Cantab. F. R. S. &c. &c. Folio, pp. 35, double Columns, with Eight Plates. Sept. 1830.

II. CASES OF PERICARDITIS. By M. Louis, Physician to LA PITIE'.

WE believe there is no hospital physician in this metropolis, who labours more strenuously to convert a public institution into an instrument for increasing knowledge and alleviating human sufferings, than the author of the work under review. Besides his excellent translation of Blumenbach's Physiology, Dr. Elliotson has, at various times, favoured his professional brethren with a work on hydrocyanic acids in affections of the stomach—and many papers in the Medico-chirurgical Transactions, especially on antimonial powder—the use of opium in diabetes—on the medical properties of quinine—on subcarbonate of iron in chorea—on the same in tetanus—on sulphate of copper in chronic diarrhœa—on rupture of the stomach—Fallopian pregnancy—glanders communicated from the horse to the human subject, &c. In all these works and insulated memoirs, our author has shewn himself a close observer and an active practitioner, who rarely or never suffers himself to be seduced from useful facts by the allurements of

theory or wild speculation. Hence it is that a great practical interest is kept up in the reader's mind, while perusing Dr. Elliotson's papers, which is not the case with the generality of works coming under our notice. There is another point which is deserving of attention. Dr. Elliotson is very scrupulous in the statements which he makes, and highly candid in the results of all his cases. We have no trifling reason to know that inattention to scrupulous veracity and unequivocal candour has been a great drawback on the progress of medical science.

In an eloquent introduction to the first lecture, Dr. Elliotson draws the attention of his brethren to the means by which improvements are most likely to be effected in the art of medicine—namely, by increasing our knowledge of the nature of diseases—in diagnosis—and therapeutics. The knowledge of diseased structure cannot be acquired without a knowledge of the healthy—that is, anatomy is necessary to pathology: but anatomy alone will give us little insight into disease.

"An anatomist is not necessarily even a physiologist: and Mery was accustomed to say, 'We anatomists are like the porters of Paris, who are well acquainted with all its streets, as well as all its lanes and alleys, but know nothing of what passes within the houses.'" 1.

The structure of the brain would never have led us to know that it was the organ of thought and feeling, without observation of those functions—in other words, physiology. Before proceeding to the immediate subject of this lecture—Pericarditis, we must indulge in an extract or two respecting the utility of auscultation.

"In improving diagnosis, it is impossible to discover only what is obviously useful. The research must be made generally, and what is at once useful and what is not, must turn up together.

In the diseases of other organs, we always aim at accuracy of diagnosis without any hope of utility. When a solid tumour exists in the abdomen, we endeavour to ascertain whether it is in the liver, the spleen, the pylorus, an ovarium, a new formation, or whatever else, although the treatment would probably be the same in all.

But there is immediate utility in the discoveries of Avenbrugger and Laennec. No one will pretend that the diagnosis in chronic diseases of the chest is, with perhaps the exception of phthisis, generally satisfactory. Before I adopted auscultation, I know that I frequently discovered disease of the heart after death, where I had not previously suspected it; and frequently found the organ sound when I had supposed it diseased. When I was correct in expecting to see organic affection of the heart, I was often wrong as to the precise nature of the lesion. Too often has auscultation at once revealed disease of the heart to me, when by good practitioners no affection of the heart or even of the chest had been suspected, or the case had been named nervous palpitation or asthma; when the lungs had been regarded as the seat of the malady, or the case been treated with the more violent remedies of hydrothorax. Repeatedly have I seen chronic bronchitis with extreme congestion in the lungs mistaken for hydrothorax, and unavoidably so from the omission of percussion and auscultation, because the symptoms were precisely the same, with the exception of those which percussion and auscultation only could disclose. Inflammation of the substance of the lungs takes place continually during other diseases without being obvious before death to any but the auscultator and percussor. Without the aid of the ear, who can ever distinguish emphysema of the lungs, or in every case pneumatothorax. Both may be readily mistaken for hydrothorax. The symptoms may be pallid face, with purple

lips, orthopnoea, sudden starting from sleep to the waking state, a small and intermitting pulse, cold extremities, and swollen feet. The remedies of hydrothorax may appear indicated; but the ear will show the chest to sound hollow, and far too hollow, at its very lowest parts, while there is in the first case little, and in the second no, respiratory murmur at the very place where the hollow sound is heard. Nothing but the ear can show the nature of these cases; nothing but the ear could distinguish them from each other,—without the ear, no case can be known with certainty as hydrothorax, however marked the symptoms." 5.

Dr. E. properly observes that the study of auscultation can never justify the slightest neglect of general symptoms and history of disease. For our own parts, we firmly believe that those who study auscultation, take more pains in observing symptoms than those who go on in the old routine. It is curious that the celebrated Hook, in his "method of improving natural philosophy," has prophesied the stethoscope.

"'There may be a possibility,' says he, 'of discovering the internal motions and actions of bodies by the sound they make; who knows but that as in a watch we may hear the beating of the balance, and the running of the wheels, and the striking of the hammers, and the grating of the teeth, and multitudes of other noises; who knows, I say, but that it may be possible to discover the motions of the internal parts of bodies, whether animal, vegetable, or mineral, by the sound they make; that one may discover the works performed in the several offices and shops of a man's body, and thereby discover what engine is out of order, what works are going on at several times, and lie still at others, and the like.'"

And again he says:—"but yet again, I have this encouragement, not to think all these things utterly impossible, though never so much derided by the generality of men, and never so seemingly mad, foolish, and fantastic, that as the thinking them impossible cannot much improve my knowledge, so the believing them possible may perhaps be an occasion for taking notice of such things as another would pass by without regard as useless. And somewhat more of encouragement I have also from experience, that I have been able to hear very plainly the beating of a man's heart, and 'tis common to hear the motion of the wind to and fro in the guts and other small vessels; the stopping in the lungs is easily discovered by the wheezing." 6.

Passing over many judicious and learned remarks, we come to—

DISEASES OF THE PERICARDIUM.

PERICARDITIS. This is a disease in which auscultation is less to be depended on than in many others. The anatomical characters differ little from those of other inflammations of serous membranes. The pericardium was never found thickened by Laennec—though Baillie says he has often found it so. Perhaps the layers of coagulable lymph, which are often deposited on the membrane, may have been considered by Baillie as thickening. The serum effused, is far less in proportion to the fibrine than in pleurisy. It seldom amounts to a pint—sometimes none is found. It is occasionally of a whitish lemon-colour—rarely limpid—sometimes very turbid, or absolutely curdled. It has been found bloody, and even sero-purulent. If the patient survive the acute stage, absorption takes place, and the two surfaces of the pericardium become more or less agglutinated by the intervention of the fibrine. The adhesions are sometimes very thick and fibrous—or even cartilaginous.

"I have frequently seen the whole cardiac and parietal pericardium coherent, (and even the proper auricles concentered to the ventricles) so that no pericardial cavity existed, the serum being entirely absorbed, and the fibrine nearly so : and such cases have occasionally been mistaken for instances of the absence of the pericardium.

Both when the pericardium is very coherent, and when it is only thickened, the morbid action may be more intense in particular spots ; for we often find knobs of cartilage at different parts, some of which dip deep into the substance of the heart.

Sometimes the fibrine effused becomes cellular, and contracting no adhesions, lies pale, like lace, upon the surface of the heart ; sometimes merely an opaque white patch remains, which can be peeled off ; and sometimes, instead of smooth patches, we have opaque white granulations.

If the inflammation has been severe, lymph is often found in more or less quantity on even the external surface of the pericardium, uniting it by bands to the pleura.

The reason is not obvious why the fibrine within the pericardium sometimes adheres, and sometimes contracts no adhesions. The degree of serous effusion and consequent proportionate separation of parts affords no explanation, because, first, we often see one portion of lymph adherent, while another by its side is not ; and secondly, there is often a total absence of adhesion without sufficient serous effusion to account for it.

The substance of the heart after pericarditis may be unchanged, or redder or paler than usual, yellowish or brown, hardened or softened. After the chronic disease it has been found hypertrophied. When the organ is softened it usually is that we observe the effused serum to be bloody. In the disease of softening of the heart I have almost always found bloody serum in the pericardium."

The causes of pericarditis are those of other inflammations—the most common being exposure to cold when the body has been heated, more especially if rheumatism be at the same time induced. It will often occur simultaneously with rheumatism, or not till after it has declined or altogether ceased. It is sometimes the result of a direct metastasis of rheumatism from the joints.

"If pericarditis becomes chronic, and it is usually not very violent but really disposed to assume the chronic form, and frequently steals on as a chronic disease from the abuse of fermented liquors, the valves and finally the substance of the heart, as I have mentioned, become diseased. From these circumstances, the connexion between rheumatism and affection of the heart was first noticed in the stage of organic disease, and rheumatism said to produce not inflammation but disease of the heart. Occasionally, the pericardium may not be affected, and occasionally but in a secondary manner: yet of this I am certain, that nearly all the cases of affections of the heart, after rheumatism, are originally pericarditis, and that, when the inner membrane is thus affected from the first, so also is the pericardium. Among the cases of organic disease of the heart connected with rheumatism, published by Dr. Wells nearly twenty years ago, in the Transactions of a Society for the Improvement of Medical and Chirurgical Knowledge, those which proved fatal displayed a complete abolition of the pericardial cavity, or strong or abundant partial adhesions, and those which did not prove fatal were marked by decided symptoms of pericarditis. In nearly all those mentioned by Sir David Dundas, in the first volume of the Medico-Chirurgical Transactions of London, the pericardium was adherent. Every dissection that I have made after death, during the early period of the disease, has proved the case to be violent pericarditis ; the history of every chronic case that I have witnessed could be clearly traced back to pericarditis ; and every the least affection of the heart that I have seen take place during rheumatism has been marked pericarditis. The pleura,

particularly of the left side, is occasionally inflamed at the same time, and the subsequent chronic organic disease of the heart is of every possible variety. Dr. Pitcairn, of St. Bartholomew's Hospital, was the first who noticed, in about 1788, the connexion of rheumatism with disease of the heart; and Dr. Baillie, in 1797, was the first who published on the subject. They considered the disease to be a morbid growth of the heart. Sir David Dundas, who published many years afterwards,—in 1808, upon the subject, without reference to the observations of these physicians, and asserting his belief that no account of the matter was to be found in any medical writer, (as though, remarks Dr. Wells, it was easy to suppose him ignorant of what had been published twelve years before in so popular a work as Dr. Baillie's morbid anatomy,) mentions the disease as dilatation of the heart, and chiefly of the left ventricle, with paleness and softness of its substance, and adherence of the pericardium. But from the imperfection of morbid anatomy in this country twenty years ago, his description is very loose. However, in one of Dr. Wells's cases, which proved fatal early, and was opened by Mr. Brodie, nothing but pericarditis was discoverable; and Dr. Wells, no less distinguished for his sagacity than his independence, evidently regarded the rheumatic affection of the heart as inflammatory, by advising copious bleeding in the outset." 9.

The disease, observes our author, appears sometimes to remain long in the form of mere pericarditis—or at least an inflammatory affection—sometimes continuing for years without signs of organic disease, proving troublesome only when cold is caught, and a fresh attack of articular rheumatism is induced. Most instances of rheumatic pericarditis commence in young persons, from about the age of puberty to near thirty. Occasionally we see it in the younger—rarely for the first time in the older. Our author once saw it in an infant.

The French do not appear to be aware of the connexion of pericarditis with rheumatism, except as an ordinary instance of internal inflammation upon the sudden retrocession of an external disease. The following symptomatology and diagnostic marks must be given in the words of the able author.

"Acute pericarditis is of course attended by more or less pyrexia. There is a pain in the region of the heart, sometimes severe and lancinating: generally darting through to the left scapula, upwards to the left clavicle and shoulder, and down the arm a certain way, and, what is remarkable, rarely extending quite so far as the elbow. I lately had a case in which the pain extended down the fore arm, but it did not quite reach the wrist. The pain is increased by pressing forcibly upon or between the ribs and cartilages over the heart, and by pressing with the points of the fingers upwards against the diaphragm, under the cartilages of the left false ribs, frequently even by pressing the epigastrium and left hypochondrium in the usual manner. The pain is often increased on inspiration, and by lying on the left side. I think patients are usually easiest upon their back. The respiration is rapid, but less so than in affections of the lungs. There is sometimes a cough, which is dry. Nearly always palpitation, frequently violent, at least upon exertion. Sometimes, though more rarely, a disposition to syncope. The pulse varies exceedingly. It is necessarily quick; and often, but not always, small, in proportion to the heart's action; and only sometimes intermittent and irregular; neither is it always hard or even very full. The countenance is described as anxious, and the features contracted: but this I imagine happens only when the pain is acute, and is equally the case in pleuritis.

On examination by the ear, the *whole* heart is found acting more forcibly, and with a clearer sound, than in health. But this is all. Auscultation appears to me, however, of

negative use. We do not discover the loud murmur nor the sonorous or sibilous rattle of bronchitis, the crepitous rattle or obscure respiratory murmur of pneumonia, nor the crepitation of pleuritic effusion, unless these diseases are combined with pericarditis. Neither have we the partially excessive or defective impulse or sound, or preternatural sounds, of organic diseases of the heart. In all uncombined cases therefore, light is thrown on the disease. I remember once having found auscultation of great use in the diagnosis of a disease which might have been considered clearly pericarditis. The patient was a poor Irishman, and the Irish are by no means happy in their attempts at lucid history and description of their diseases. He complained of pain in the region of the heart, increased on pressure, palpitation, dyspnoea, and declared he had been ill but a few days. The case appeared pericarditis. The pulse was full, and the constitution good. There appeared every reason to bleed him freely, and put the whole antiphlogistic plan in force. But on listening to the heart's action, the left ventricle gave a violent dead noiseless blow against the chest, and the case was evidently one of hypertrophy of the left ventricle. I insisted to the man that he had long been ill, and it was ascertained from his own mouth, and from his wife, that he had suffered palpitation and dyspnoea for a great length of time, and that the error of his history arose from his having been compelled to leave off work for a few days only before. He died in a fortnight, and great hypertrophy of the left ventricle was discovered.

M. Collier says that the action of the heart is accompanied by a sound resembling that of new leather. Laennec does not mention it, but remarks the occasional occurrence of a sort of click, which some persons mistake for a *bruit de soufflet*.

The diagnosis of pericarditis is thought by many to be extremely difficult. Laennec declares that he has frequently suspected it where it was not found, and found it where he had not suspected it. By close inquiry into the existence of all the marks just mentioned, I confess the diagnosis has never proved difficult to me. I would particularly lay stress upon the extension of the pain from the region of the heart to the scapula, shoulder, and a certain way down the arm—symptoms which patients will not always mention unless questioned respecting them; and its increase on strong pressure upon or between the ribs and cartilages over the heart, and upwards under the cartilages of the left false ribs. These two points I do not remember to have seen mentioned any where, and the others are not dwelt upon in some of the best books. In Andral's *Clinique Medicale*, pain of the epigastrium on pressure is said to have occurred in some cases, but the point is not spoken of as if inquired into; in one case only is the extension of pain to the arm mentioned; and its extension even to the shoulder does not seem to have formed an object of inquiry.

I am certain that, by a scrutinizing examination, the existence of pericarditis will very rarely be mistaken; and from this conviction, and the frequency of its occurrence during acute rheumatism, I make it as invariable a rule to examine the cardiac region by the touch and hearing in every case of acute rheumatism, as the usual seats of hernia are examined by us in all cases of colic and intestinal inflammation. Were this rule universally observed, practitioners would not be occasionally surprised by the death of patients in what had been considered merely acute rheumatism." 10.

We shall here introduce two or three cases of pericarditis recently published by M. Louis as occurring in LA PITIE', and in which some phenomena are recorded, and some opinions broached, which are deserving of notice.

Case 1. A young man, 25 years of age, had been ill 15 days before admittance into St. Raphael's ward, LA PITIE'. The complaint commenced with dyspnoea, accompanied by pain in the left side, immediately after receiving a fall while carrying a burthen, in which fall he struck against the pole of a voiture. The dyspnoea and pain increased—palpitation ensued—the appetite diminished—and the man was obliged to leave off work. Four

days after the accident, his sleep became disturbed with frightful dreams and startings up in bed—diarrhœa came on, and the lower extremities became œdematous. In this state he came into the hospital, on the 21st of April. The breathing was now very much embarrassed—cough not frequent—expectoration easy—the respiratory murmur free from the slightest degree of rattle—percussion of the chest elicited a clear sound, excepting in the region of the heart, which shewed a marked protuberance, 6 inches in extent. The pulse was 120, but regular—the lower extremities œdematous. No thirst. The diarrhœa had ceased—the intellectual functions were quite free. He was bled to 16 ounces, and ptisanes, with nitre and digitalis, exhibited. The night was tranquil, and the next day (17th of the disease) the pulse fell to 70 in the minute, and regular. The œdema of the lower limbs had disappeared—and there was considerable diminution of the præcordial saliency. There was a partial return of sonority in the region of the heart. By the 25th day the protuberance had entirely disappeared—that part was nearly as sonorous as any other—the cough and dyspnœa had ceased. The patient soon afterwards left the hospital well. That this was an inflammation of the pericardium, and not of the heart itself, M. Louis thinks is proved by the absence of palpitation—and by the dull sound, owing to effusion into the cavity of the pericardium. This was the second time that our author had observed a protuberance in the region of the heart during pericarditis. In the other case, the fatal termination proved the nature of saliency—in the present, he has no doubt that the same effusion obtained. The œdema of the lower extremities, he remarks, is a phenomenon well worthy of attention. It is almost peculiar, in acute diseases, to affections of the circulating system.

Case 2. A young man, 21 years of age, well formed, and of tolerably good constitution, had been ill eight days before admittance into the hospital, on the 4th of June. Two weeks previously he had received a blow on his back between the right scapula and the spine. A shiver was the first symptom he perceived, which recurred in the evening of the same day. Palpitation, with some dyspnœa, ensued, the latter being, however, habitual. 5th June, ninth of the disease. Slight oppression—could lie without any additional elevation of the head—pulse calm, regular—heat natural—some palpitation—chest perfectly sonorous, except in the præcordial region, where it was quite dull. It was the same with the respiratory murmur, which was entirely absent in the part that sounded dull. Diluents, with nitre and digitalis. The rigors recurred on the 5th, 7th, 8th, and 9th. Venesection was performed on the 8th, the blood being slightly buffed. Between the 7th and the 25th of June, when the patient quitted the hospital, the following phenomena were noted. The præcordial region gradually regained its sonoriété—so that, by the 12th of June, it was natural. The palpitation did not quite subside till the 22d of the month, which was partly attributable to some errors of diet. The pulse was always regular, and not accelerated. He had no prostration of strength—no œdema of the limbs—no protuberance of the præcordial region. He left the hospital on the 27th day of the malady, quite well.

M. Louis thinks that, although there was no excitement of any consequence in this case, nor saliency of the cardiac region, nor œdema of the limbs, as in the first case; yet that the dull sound and want of respiration in the region of the heart, at the beginning, with the gradual return of sound and respiration in the part—coupled with the palpitation, proved that pericarditis had existed, as there was no evidence of any affection of the lungs. We conceive that, if pericarditis did obtain in this instance, it must have been very slight indeed.

Another case, somewhat similar to the last, is related by M. Louis, but we do not deem it necessary to quote it. The absence of sound and respiration, with some irregularity of the pulse and febrile movement, all gradually disappearing, authorized him, he conceived, to pronounce the disease pericarditis. He conceives that this inflammation is much more frequent, and much less dangerous, than is generally imagined—that like pleuritis, it is always accompanied by more or less effusion, producing the phenomena above-mentioned—and, that, when we find adhesion of the pericardium to the heart, we see an instance of pericarditis cured, perhaps without any remedial measures having been used. These observations we commit to the consideration of our readers. But to return to Dr. Elliotson.

He informs us that the treatment of the disease in question does not come within the range of object in these lectures; at the same time he lets fall some valuable hints relative to the *METHODUS MEDENDI*. These we shall quote, as they may not prove unacceptable to our readers.

"I have observed free local bleeding more serviceable than general; and that mercury is of equal efficacy in acute pericarditis as in other acute inflammations, over which, wherever they may be situated, a very extensive experience of many years has fully satisfied me, conformably with the observations of so many able physicians, that it possesses far, very far, more power than any other medicine. Bleeding and other ordinary measures cure cases of severe inflammation every day, and, in cases of little danger, may be relied upon. But they frequently fail in cases of intensity; and I know that if, in addition to suitable bleeding, mercurial ptyalism is quickly induced, active inflammation will very rarely destroy; and that, not only is fatality almost always prevented, but far less bleeding is required. This has been my practice from the commencement of my professional life, and I have never met with a necessity for those frightful bleedings of quart after quart, recorded from time to time in our publications, where I also employed mercury with freedom. I have given the antimonium tartarizatum in quantities of a scruple and half a drachm every twenty-four hours, hydrocyanic acid, and other medicines recommended by the Italians, but found them all greatly inferior to mercury. Among the best unquestionably is colchicum, and its power over active gout and rheumatism of the extremities is universally acknowledged to be very great. After the violence of acute pericarditis is subdued, it appears of use in restraining the morbid irritability which sometimes still continues in the heart; and several chronic cases, of which I had despaired, have gradually recovered under perseverance in its use for many months." 11.

The following passages will bear on the subject of pericarditis as viewed by M. Louis.

"The quantity of fluid at a certain period of acute pericarditis, and in chronic pericarditis, is occasionally, but not often, so considerable that hydrops pericardii exists. The quantity should certainly be half a pint for us to expect inconvenience. Unless it is considerable, it is indicated with no more certainty by percussion and auscultation than by the ordinary symptoms. But if the quantity is large, there is a dull sound to a great extent

on striking the cardiac region; the heart's action may be perceived very faintly, and perhaps in a diffused manner, so that the epigastrium pulsates or vibrates and may appear fuller than in health; patients have experienced a sense of weight in the cardiac region, and even fluctuation has been detected. In cases of copious effusion of blood, pus, or serum, into the pericardium, these symptoms have suddenly appeared, and good examples of the occurrence of some of them may be found in Andral.

A fluid occasionally collects in the pericardium, as in the pleura and peritoneum, arachnoid and tunica vaginalis, by a slow process, not amounting to inflammation. The membrane is not red, but perhaps opaque, and even thickened and of a satin whiteness. This condition is, I believe, where no redness of inflammation is visible, the common cause of ascites, chronic hydrocephalus, hydrocele, and idiopathic hydrothorax; and though, like the state which gives birth, as I shall presently mention, to one kind of adhesions in serous membranes, it may be the result of a change allied to inflammation, it hardly merits the title of inflammation, from the absence of inflammatory symptoms, the absence of redness in the membrane, the pellucidity of the fluid, and the inutility of anti-inflammatory measures.

The adhesions within the pericardium left after pericarditis are almost the only instances that occur in this membrane. I have never seen adhesions except with redness of the membrane, or the presence of turbid fluid, or after the existence of decided symptoms of pericarditis. In the pleura they are continually found, without the least previous symptoms of inflammation, and without redness or turbid effusion; and though, like chronic dropsy of the membranes, they may result from what cannot be proved to be an inflammatory state, they certainly, like it, are no proofs of any thing deserving the decided name of inflammation.

In the case neither of the pleura nor pericardium, do they in general produce the slightest inconvenience. I have seen the whole pericardium so coherent that its cavity was entirely abolished, and yet the symptoms which had been present were exactly commensurate with the organic disease of the heart which existed at the same time, and had certainly no relation to the adhesion. I cannot say I ever observed a symptom produced, except in one case, and there a single thick adhesion extended along the front of the heart. In the supine posture this must have been dragged down by the subjacent heart, and must have tended to drag the pericardium of the front of the chest with it, and to suspend the heart, so that the parietal and cardiac pericardium at their points of union with it must have put upon the stretch. The patient accordingly had been unable to lie on her back, on account of a smarting pain produced in this posture at the front of the cardiac region. Bertin,* in his excellent work upon diseases of the heart, states that adhesions often produce no symptoms, but gives one case in illustration that inconvenience sometimes is felt: yet in this case, adduced singularly enough, the substance of the heart, in addition to the adhesions, was found very soft—a change quite sufficient to explain every symptom that occurred." 11.

To the second lecture, embracing a very distinct and very important subject—"affections of the lining membrane of the heart," we must dedicate another article. Such practitioners as Cooper and Elliotson do not come every day under review, and as their works are in forms that render them but little accessible to the great mass of the profession, we must endeavour to supply the loss thus sustained, by more copious and careful analyses.

* *Traité des Maladies du Cœur et des Gros Vaisseaux*, par R. J. Bertin. Paris, 1824, p. 254.

Periscope ;

OR,

CIRCUMSPECTIVE REVIEW.

"Ore trahit quodcunque potest, atque addit acervo."

I.

HYDROPHOBIA.

1. REMARKS ON HYDROPHOBIA. By J. MURRAY, F.S.A.

2. ON CANINE MADNESS, &c. By W. YOYATT, V.S. &c.

WHEN the lake is agitated by the storm, sand and mud will be raised from the bottom, and float, for a time, on the waves. When *Ætna* or *Vesuvius* is convulsed by subterranean fires, stones will rise into the air, and ashes will wing their flight to Egypt, Constantinople, or Africa. So, during the late epidemic cynophobia, a host of speculators rushed into print, and the *Times*, the *Herald*, and the *Lancet* teemed with proposals, theories, and therapeutics, not one of which was worth the lamp-black and oil expended on the printer's types in their progress through the press. It is not our intention to notice these crude productions of excited imaginations. One example will be sufficient. Mr. Jenkins has proposed excision of the largest and nearest *nerve* to the hydrophobic wound! The reasoning on which this proposal is founded, amused us a good deal. As the disease is sometimes many months, and generally several weeks dormant after the receipt of the poison, Mr. J. infers that the *absorption* goes on through the medium of the nerves, and not through the medium of the absorbents or blood-vessels! He does not give us any reason why the virus of the dog should refuse to take the usual routes, and insist on marching with a snail's pace along the nerves. He does not, he cannot offer us any proof respecting the period of absorption at all.

How does he know the time necessary for the poison's residence in the system at large? Does the matter of small-pox remain in the wound where it is inoculated for several days till the constitutional symptoms commence? Does the contagion of plague, or typhus, or measles remain on the air passages, or the skin, or the nares, for a fortnight or three weeks, before absorption, and constitutional disturbance? Every specific poison appears to have its own period of incubation, if we are allowed the expression, and where its habitation is, or what its operation is during that period, we are totally ignorant, and probably will remain so. But the proposal of cutting out the most proximate nerve to the wound is, we apprehend, one of the wildest and most absurd speculations which we have yet heard. The whole question respecting the pathology and therapeutics of hydrophobia remains in *statu quo*—namely, in utter darkness—and the prophylaxis is nearly in the same state. Excision is the preventive which rests on the basis of facts—suction is doubtful—and all other prophylactics are speculations, without the shadow of proof.

Nevertheless we shall give one of the latest proposals which have been made, because the author is a sensible and clever man, though not strictly of the medical profession—Mr. Murray, the chemist. The preventive which this gentleman proposes, in addition to the usual local means as respects the bite, is an atmosphere of chlorine.

"He might also for some time wear the portable voltaic instrument of Bunsford, to which at any rate there can be no reasonable objection; and it may also, on a review of

the nature of the disease, be deemed interesting, to encase the body in oiled silk or otherwise, and by this means be enabled to surround the cuticular surface with an atmosphere of chlorine, disengaged in the usual way from a retort, containing its ingredients, the beak of which is inserted into the envelope. We are anxious to employ the entire apparatus of safety, and be secure at all hazards by doubling the means of precaution, though part may be supposed superfluous and redundant."

"Whether the nervous system be primarily or secondarily affected, it is extremely advisable to apply voltaic electricity to the patient, *ab initio*. The pensile galvanic pile is a convenient mode of excitement, and is promptly renewed; the organs concerned in respiration should be included in the circle formed by the conducting wires, and afterwards the brain. Our chief reliance would be on an atmosphere of chlorine, applied in the way already described, to the surface of the body, so that the system should be charged with it. The next remedial measure is to impregnate the atmosphere which the patient breathes, either with chlorine or with the vapour of red fuming nitrous acid, placed near, and the latter would less irritate the lungs; the inflammatory action might be subdued by the frequent internal exhibition of chlorate of potassa, in doses repeated at frequent intervals, of from four to eight grains: we know oxygen has been suggested by way of trial in this disease, but the important facts established by Count Morozzo, Allen and Pepys, and more recently by Mr. Broughton, give us no reason to expect relief from that quarter. Animals soon die in pure oxygen, and the gas, it is interesting to remark, suffers no chemical change.

We have already adverted to the absorption by the pores of the skin, of carbonic acid gas, and the experiments of Dr. Edwards, in the 'Annales de Chimie et de Physique,' (January, 1819,) corroborate this by analogy. It is well known that water applied to the surface of the skin allays thirst, as immersion in salt water; and in the desert

the traveller has revived from that fatal state into which he was fast sinking by skins of water being thrown on the body. In Mr. Broughton's interesting experiments,* we find in the case of animals that perished in chlorine gas, the peculiar odour was perceptible throughout the structure of the lungs, a full proof that the gas had passed the epiglottis, and entered the system by the air passages: the tissue of the lungs was also dyed yellow, and we are not acquainted with any aerial agents whose power to subdue inflammation, &c. of this kind, surpasses chlorine, and the vapour of nitric, and nitrous acid gas: the remedy must be introduced through the medium of respiration, in order to bring it in immediate contact with the mucous membrane of the bronchiæ, the seat of active inflammation.

Frictions of iodine externally in the region of the lungs may be also esteemed a remedial measure worthy of trial. When the skin, however dry, is brought in contact with chlorine there is the sensation of a considerable increase of temperature immediately produced, though the thermometer is completely unaffected in the case: this fact was first pointed out by Dr. Hare, of Philadelphia, and we discovered a precisely similar phenomenon with nitrous acid gas. (Philosophical Mag. and Journal, vol. 60, p. 100.) This fact proves a very determinate and specific action on the skin, and it must not be forgotten that comparatively dry chlorine will act a very different part from the same gas held in solution in water,—*hygrometrically* as well as chemically. In the case of chlorate or oxymuriate of potassa, its medicinal efficacy is connected immediately with the circulation: it will soon give evidence that it is so by lowering the pulse without any prostration of physical strength. It was exhibited on our suggestion in a case of epilepsy, and the blood that was subsequently drawn from the patient was remarkably bright, being of a brilliant red. Its effect is frequently instantaneous, and the morbid

* See Mr. Brande's Journal, for 1830, p. 15, &c.

state of the blood in hydrophobia seems to warrant us to expect some important relief from its exhibition. M. Ségalas D'Etchepare has shown that besides a direct and sympathetic action on the organic solids it exercises a very manifest one on the blood, and consequently over the whole economy through the medium of absorption; and had Majendie's injections of tepid water into the veins, held *chlorate of potassa in solution*, the case might have been happily altogether different."

The above extract contains the gist of Mr. Murray's proposal, and to which we see no possible objection. It is a much more rational tentative than that of Mr. Jenkins; but whether it may prove a whit more successful, is yet to be decided by facts.

Mr. Youatt's work on canine madness is a sensible and useful performance, being the result of much practical experience. In the following extract, we apprehend that even this experienced observer has assumed more than is capable of proof in regard to the dormant period of the hydrophobic virus—or rather the locality of the poison during that period.

"An animal or a human being is bitten by a rabid dog; and a certain portion of the poison is received into the wound. It produces no immediate irritation; there is nothing to indicate its presence. Some old writers, indeed, recommend us to place the fresh leaves of rue on the wound. If they retain their colour, it is not envenomed. If they change to a violet colour, the rabid poison has been introduced. They likewise tell us to rub a bit of bread in the blood or fluid discharged from the wound. If there be no danger, a dog will readily eat of it; if it be contaminated with the virus, he will refuse it with howling.

These fooleries are now despised. There is nothing to indicate the presence of the virus. The wound heals, as would another wound, according to its situation, magnitude, laceration, and the constitution of the patient. Days, and weeks, and months pass, and not the slightest circumstance occurs to indicate impending danger.

What then is this virus? It has never been analysed. That would be a process difficult to accomplish. It is not diffused through the air, nor communicated by the breath, nor by any effluvia, nor even by actual contact, if the skin be sound. It must be received into a wound; or it must come in contact with some tissue or nervous fibril; and there it lies dormant for a considerable but uncertain period, and longer in some animals than in others.

It remains perfectly undecomposed. The absorbents are actively at work in removing every thing around. The capillary vessels are depositing fresh matter, but it seems to remain the same. Whatever else is useless, or would be injurious, is taken up, and the tissue or the fibril on which the virus rests, is modified or changed; but this extraneous and fatal body bids defiance to all the powers of nature.

It enters not into the circulation, or it would necessarily undergo some modification in its passage through the innumerable minute vessels and glandular bodies which are scattered through the frame. It would excite some morbid action; or if it were not thus employed, or in the purposes of renovation or nutrition, it would be speedily ejected.

It lies for an uncertain period dormant; but at length, from its constant presence as a foreign body, it may have rendered the tissue or nervous fibril more irritable and susceptible of impression; or it may have attracted and assimilated to itself elements from the fluids that circulated around it, and thus increased in bulk; and at length, according to a law of chemistry, supplied by quantity that which it wanted in strength of affinity.

Whatever be the *modus operandi*, the parts in contact with the virus at length respond to the stimulus applied to them. The cicatrix generally begins to itch, and inflammation spreads around it. The diligent licking of some part where the mark of a bite can be traced is an early and frequent symptom of rabies in the dog. The absorbents are now called into more powerful action. They begin to attack even the virus. A portion of the morbid matter is taken up and car-

ried into the circulation, and disease and death ensue."

If the virus lurks so long in the wound, how is it that "excision of the part has frequently failed," according to Mr. Youatt's own confession? The following explanation is, to us, very unsatisfactory.

"The knife may penetrate the deep and tortuous recess of the wound, in which the virus is lodged, and then its track will be empoisoned. Or if the incision be freely made round the wound, and does not penetrate into it, the blood will follow the knife; a portion of it will enter into the wound inflicted by the dog; it will come in contact with the virus; it will be contaminated; it will overflow that cavity; it will be received into the new incision, and it will carry with it the seeds of disease and death."

Mr. Youatt, therefore, abandons excision, and has recourse to the nitrate of silver as a caustic. The stick is to be sharpened to a point, and every sinuosity of the wound is to be searched and penetrated. The eschar having sloughed off, he advises the re-application of the caustic.

"It is painful to speak of one's-self; but I may, perhaps, here be permitted to say, that I have been bitten four times by dogs decidedly rabid. At each time I freely applied the caustic to the wound; and I am living to the present day. I have operated on more than four hundred persons, all bitten by dogs, respecting the nature of whose disease there could be no question.* I have not lost a patient. One poor fellow died of fright, but not one became hydrophobous. To what can I so naturally attribute this, as

to some chemical affinity between the nitrate and the virus, by which an insoluble and inert compound is formed.

II.

SLoughing Ulceration of the Penis Benefitted in a Remarkable Manner, by Vapour-Bathing.

The following is an abstract from a paper which we believe was read before the Dublin Association, by Dr. H. C. Field.

A gentleman, aged 36 years, became Dr. Field's patient on the 1st September, 1829, for an extensive excoriation around the edge of the prepuce, the result of an imprudent connexion three months previously. The ulceration was daily extending—the penis was swelled, red, shining, and evidently in a state of intense inflammation. The ulceration itself had a dark livid aspect—and a purulent discharge issued from under the prepuce. The patient refused to have the foreskin slit up, there being a natural phimosis, and therefore aperients, poultices, and tranquility were enjoined. *Sept. 2d.* Great pain extending to the testes—ulceration livid and spreading in a deep circle round the prepuce—febrile excitement. *Venesectio ad 3xx*—saline purgatives—poultices—bolus of antimony and opium at bedtime. *5th.* Relieved by the bleeding—but the tumefaction and livid inflammation had extended over the entire penis, which was exquisitely painful. A great portion of the prepuce was now destroyed by the ulceration, and rendered visible a deep foul ulcer of the glans penis. Leeches—fomentations—poultices. The anodyne antimonial at night. *8th Sept.* The swelling is reduced, and the pain diminished; but the ulcer has extended, and has a dark gangrenous appearance, with ragged irregular edges. Almost the whole of the prepuce is gone. The whole of the penis is livid and extremely painful. Around the edge of the ulcer there is a vivid redness—next to this a purplish circle, which loses itself in the dark color of the penis. Leeches—a mercurial purge,

* "I am bound to add, that one of the surgeons of St. George's Hospital told me, that since his connexion with that establishment, he and his colleagues had operated on more than as many thousands, bitten by dogs (he could not say that all of them were rabid), and he was not aware that one of them had been lost. This, at least, is most consolatory, whatever may become of my theory of the caustic."

11th Sept. The ulceration is still extending. The nitric acid was applied to the ulcer, and then lint saturated with a strong solution of opium; over all, a fermenting poultice. A grain of opium and 15 drops of nitrous acid to be taken thrice a day. 15th. Part of the eschar formed by the acid, and part of the dark gangrenous sloughs came away with each poultice; but the parts beneath were in a state of complete mortification—the integument of the penis was sloughing more rapidly than the deep-seated parts. The patient was in an unhappy nervous state, with distressing palpitation and nervous irritability. Camphor mixture with Hoffman's liquor, 6tis horis—also a drachm of cinchona thrice a day, with the nitrous acid as before. The dressings to be repeated. 18th. Dr. Colles was called in consultation. The sloughing was steadily advancing—the pain in the last night had been great—the body of the penis swelled and livid. The same remedies were recommended to be pursued, with the addition of balsam of Peru and carrot poultice. 22d Sept. The glans penis was now gone, leaving a surface and pendulous shreds, both gangrenous. A probe sunk deep into a disorganized structure. The patient was dejected—had a small weak pulse, dark-colored tongue, &c. 25th. The mortification was now in possession of the corpora cavernosa penis, and rapidly extending towards the pubes. As a last resource the patient was advised to hang the penis, for half an hour at a time, over the steam of hot water, in a metal vessel, with flannel enveloping both the parts and the utensil, in order to retain as much as possible the vapour. The medicines continued, with the exception of the nitrous acid. 27th Sept. He was so much relieved by the vapour-bathing, that he slept four hours in the night of the 25th. He therefore applied the vapour six hours daily from that period, as hot as he could possibly bear it. He has had no violent pain since the commencement of the steaming. The sores soon began to assume a more healthy aspect—a granulating point appeared on the left corpus cavernosum—the countenance cleared up—and the inflammation and tumefaction soon disap-

peared. Quinine was now substituted for the bark. With the exception of a profuse hæmorrhage, which occurred on the third of October, nothing obstructed the progress towards convalescence, till the 10th of October, when it was found that the granulations had nearly closed the orifice of the urethra, and required the use of the bougie. The irritation produced by this instrument caused some inflammation of the livid kind to return and threaten the patient. This, however, was speedily removed by the vapour-bath, and on the 20th of October, the whole was cicatrized.

III.

SULPHATE OF QUININE IN ACUTE RHEUMATISM.

Our readers know that Dr. Haygarth, and many others since his time, ventured to treat acute rheumatism—in common parlance, rheumatic fever, by bark instead of depletion. Numerous cures, and speedy ones too, are reported in the periodical journals, on this plan, and these reports, even admitting them "*cum grano salis*," as medical reports should generally be received, prove sufficiently that rheumatic is not common inflammation. The intensely buffed state of the blood, however, the frequent metastasis of the phlogosis to the heart, the colour of the urine, the temperature of the skin, the thirst, and the rapidity of the circulation, should induce us to be cautious how we administer powerful tonics in such conditions of the system. We have been led to these preliminary remarks by the hospital report of a case from the wards of the Royal Infirmary of Edinburgh, recently published; and as the case is very short, we shall first introduce it to our readers.

"Catharine Morgan, ætat. 30, admitted on the fifth day of fever, accompanied with symptoms of acute rheumatism; *she had likewise cough, diffused pain in the chest, increased by full inspiration; her respiration*

was hurried; expectoration mucous and adhesive; pulse frequent; bowels slow; she had a similar attack two months before. On admission, the symptoms of rheumatism were so prominent, as to *hide or obscure many of the others*. It was to this affection, consequently, that Dr. Duncan's attention was especially attracted; indeed the pectoral complaints were scarcely noticed at all till the day after he had ordered the remedy he considered it expedient to use against the rheumatism, this was the sulphate of quinine, concerning the efficacy of which, even in the most acute form of this disease, he had already given so decided an opinion; in this case, however, its administration did mischief to a certain extent, for on the following morning the cough and dyspnœa could no longer be overlooked, and some annoying abdominal symptoms also made their appearance, the epigastrium being very tender to the touch, with considerable internal pain. The quinine was of course immediately omitted, and leeches were applied; their operation was followed with great relief, and during the night she slept better, and perspired abundantly. After this, the treatment of the case was exclusively antiphlogistic, and she was dismissed cured on the 29th of March."

How the cough, pain of chest, hurried respiration, quick pulse, and tenacious expectoration could be overlooked, after being noted on the day of admission—and especially by so able an observer as Dr. Duncan, we are unable to even imagine. It is distinctly stated that these symptoms *accompanied* the symptoms of *acute rheumatism* on admission—and yet the latter did *hide or obscure* the former!! We are very much inclined to suspect that these thoracic symptoms were occasioned by the administration of the tonic, as well as the pain and tenderness of the epigastrium. Such cases as these give fair scope for scandalization among our Broussaian brethren of the continent, and the ignorant or careless—perhaps mendacious manner of reporting them increases the evil tenfold. It is therefore necessary that a check should go forth with the evil, to show that we are not blind empirics and

indiscriminate routinists on this side of the channel. We are disposed to think that the mercurial practice in acute rheumatic inflammation, adopted by Dr. Chambers and many other observant practitioners on this side of the Tweed, is far preferable to the tonic and stimulant treatment recorded in the foregoing case.

The same accurate and veracious reporter tells us something about a case of "articular rheumatism" which yielded to the antiphlogistic treatment, "followed up by the use of colchicum wine, in the dose of *three grains*, repeated thrice daily." Verily the reporter and his editorial master are clever directors of the practice of medicine in this country!!

In the same luminous report, we are informed that a young woman, who was evidently labouring under one of the anomalous forms of hysteria, (which in this case, assumed the character of Nephritis) was bled to 163—but whether ounces or pounds the reporter saith not. If any confidence indeed could be placed in the report, we should be rather surprized that the talented Dr. Duncan did not, at once, attribute the complaint to its proper class, and spare the effusion of human blood. After repeated leechings and other depletive measures, "she was suddenly attacked with a similar pain (to that in the region of the kidneys) under the sternum." Although the hysterical Proteus shifted his ground, he did not elude the persevering enemy who depleted to 163 ounces or pounds!

IV.

MR. LAWRENCE ON CORNS.

FROM the talented lecturer's short disquisition on corns, we suspect that Mr. Lawrence never suffered from the "pinching of the shoe;" otherwise he would have recommended a more efficacious mode of treatment for this ignoble but very painful complaint. With the etiology, physiology, and pathology of corns, we shall not quarrel. The *methodus medendi* is not what quadrates with our experience.

"The palliative cure of corns, as we may call it, consists in cutting away the indurated cuticle, so as to remove from the inflamed skin, at all events, this mechanical source of irritation. The feet are first soaked in warm water, so as to moisten the indurated cuticle; you then take a sharp knife and cut away the morbid cuticle which has accumulated over the inflamed parts of the skin. In doing this, after you have removed the inflamed part, you generally come to a sort of point, where the cuticle seems to extend deeper than at the other parts; indeed it appears as if at one point the disease extended farther into the skin than elsewhere, and this has been commonly called the *root* of the corn. It is said that you may lift up and take away in a mass that part of the hardened cuticle which is thus formed in the corn; but I apprehend it is not very easy to do this. *However, if you cut away the thickened cuticle in this manner, and cover the part with soap plaister, or some other mild plaister, spread on leather, and direct the patient to wear shoes that produce no pressure, great relief is experienced.* You find that usually the covering of the cuticle re-forms after this operation; but if the patient avoids the external source of irritation, the corn will not become seriously troublesome. If, however, considerable inconvenience be still experienced, you may proceed to further measures for the more effectual relief of the case—that is, after shaving away all the thickened part of the cuticle—you may rub the skin with lunar caustic. Thus you diminish the inflamed and irritable state of the skin, and then perhaps have no re-formation of the corn, if you avoid the external exciting cause; at all events the patient will derive very great alleviation from this simple process."

We are ready to grant that if the patient, after the erasure of the corn, wears shoes which "*produce no pressure, great relief is experienced.*" But where are such shoes to be procured? Certainly not at Hoby's, nor at any fashionable shop in London. If we examine the feet of the Venus de Medicis, the Belvidere Apollo, or even the Farnese Hercules, we can perceive no corns. But modern fashion aims at making the anterior

extremity of the foot more narrow than the posterior—the toes more acute than the heel. Mr. Lawrence, therefore, should have recommended, at once, the sandals of the Greeks and Romans, as the only shoes that caused "*no pressure.*" But the gallopadæ and quadrilles of our times will not harmonize with the sandal; and therefore some remedy must be devised for the "*pressure of the times.*" The simple cover of "*soap plaister*" is insufficient; and we are much surprised that Mr. Lawrence should have overlooked the obvious measure of throwing the pressure upon less prominent parts, by means of a series of plaisters with holes in their centres, and then one general cover over all. This is the only effectual defence, so long as we wear shoes or boots; and the mechanical explanation of its efficacy does at all deteriorate from the surgical dignity of its etiology.

The CHIROPODISTS of this luxurious age, (for we have now doctors for every part and disease of the body, from water on the brain to horn on the toes) make a great noise about the distinction between corns and bunyons. The following observations of Mr. Lawrence shew that these two affections are often conjoined—or probably stand to each other in the relation of cause and effect.

"There is an affection somewhat allied to, and in fact often actually connected with corns, which, however, in some respects is different from them. It is that kind of swelling which is called *bunyon*. This forms on the prominent joint of the great toe, that is, the joint between the first metatarsal bone and the first bone of the toe, a part of the foot particularly prominent, and thus particularly liable to pressure from the hoot or shoe. The swelling thus formed is larger, and generally attended with more redness of the skin and tumefaction, than we see in corn; but besides there is often a hardened and thickened state of the cuticle over the most prominent part of the swelling, which constitutes bunyon. I believe the swelling of bunyon itself consists of inflammation of a bursa mucosa, which is seated between the skin and the prominent part of

the joint in question;—a bursa mucosa in a situation which is analogous to that of the patella or olecranon, and by the irritation of a bursa from the pressure of the boot or shoe, a state of inflammation arises with effusion into it. If you open this swelling, you find generally that a fluid escapes. When this is in a state of inflammation, you may adopt the same means that you would do in cases of inflammation of other bursæ—leeches, poultices, lotions, or cold applications. Now the prominent part of the skin is liable to become the seat of corn, and I believe in many instances the irritation thus produced is the cause of the inflammation of the bursa. Sometimes the inflammation of the bursa becomes so considerable that a formation of matter takes place—abscess occurs, and the matter makes its escape externally. If a corn form in this situation, you must adopt the means I have already described to you, and so far as the inflammation itself goes, you have only to adopt the usual antiphlogistic means, and afterwards take measures to protect the part which is the seat of disease from the pressure of the shoe or boot.”

V.

TAX ON ENTERING THE PROFESSION.

A sharp fire has lately been kept up between *medici* and *mediculi* respecting an apprehended additional tax on those who are entering the profession of medicine and surgery. The law is about to establish a tax, we understand, of about two hundred pounds on all those who are about to start in the pursuit of forensic wealth and fame. The reason alleged is the crowded state of the legal ranks, and the consequent deterioration, not only of the trade, but of the respectability of the members themselves. A redundancy of population has, in all countries where it exists, led to deterioration of morals and the commission of crimes. It

cannot be otherwise. Poverty is the parent of vice—and necessity is the mother of invention—not the invention of good for our neighbours, but of the means of filling our own bellies, no matter at whose expense. China furnishes a striking example of superabundance of population. A bad harvest puts millions to death by hunger and leads to terrible scenes of cruelty. But at all times it authorises the crime of infanticide—or what is equivalent to infanticide, exposure of infants on the rivers and in the streets. This crime against nature is *permitted* on account of the surplus of population. So, when a profession or trade becomes over-stocked, it leads to all kinds of vile tricks as well as to ingenious inventions. If it only produced generous and fair competition all would be well; but he can have only a very small share of discernment, who does not see the host of disingenuous arts which flow—unavoidably flow, from redundancy of hands. *MEDICULUS*,* in censuring any measure that can check the influx of members into the medical profession, seems to overlook entirely this view of the subject—and to anticipate nothing but the improvement of medical science by the collision of rivalry, and the competition for bread. Alas! he knows little of the means and of the machinery which are called into operation in medical competition! The labour of improving medical science would stand a very poor chance, when opposed to the art of extending medical connexions, not by inventing more successful modes of treatment than our neighbours, but by devising more ingenious methods of traducing our competitors and aggrandizing ourselves at their cost! When *MEDICULUS* grows up in time, to the size of *MEDICUS*, he will see a little of this, both in town and country.

What is the remedy? Nothing, we conceive, can check the increase of the evil, but a diminution of the inordinate influx of members into the great professional family—whether legal or medical. We certainly cannot admire a direct money-tax on aspi-

* Medical Gazette, July 3, 1830.

rants, proposed, of course, as a prohibition against the introduction of the indigent into our ranks. Such a measure operates against *merit* as well as against indigence, and deserves all the execration which *Mediculus* has bestowed on it. But let the tax be laid on in the shape of *KNOWLEDGE*—and we think it could scarcely be too heavy. This is the proper way to reduce the redundancy of the medical population. It would act in a doubly beneficial way—by lessening the number of candidates and by increasing the scale of their education, which increase would render them more liberal as well as more respectable. Thus, without prescribing this or that seat of learning, the proofs of classical and other elementary learning should be as ample as those required for the highest grades of the profession emanating from our universities. If the examinations in Greek, Latin, mathematics, and all the arts and sciences that adorn life, were as rigid for one member or class as for another, then we would have real and proper equality in our ranks, as well as a much smaller number. The discontent and jealousy engendered by different grades and invidious distinctions would be done away with at once. And we prophecy that the necessity of placing this strong barrier of high acquisition on the multitude of labourers who rush towards the harvest of medical practice, will soon be felt and seen by those who have the legislative regulations in their department. Indeed the process is, at this moment, going forward for an amelioration of the profession, in the gradual elevation of scale by which medical and surgical competency is measured. The corporate bodies should unite, and agree on one large and liberal regulation respecting medical education. The check to redundancy, on this plan, does not prohibit the poor man because he has not money, but because he has not education and knowledge—nor does it admit the rich man's son because he has wealth, but because he has a proper degree of information. To sum up in one sentence:—Equalization of titles and rank, in the republic of medicine, can only be based on equalization of scholastic education and scientific acquirements. This primary equi-

brium established—this common starting-post fixed, talent, assiduity, friends—CHANCE, will still afford ample sources of inequality in public estimation and fortune, which we can no more regulate by legislative enactments, than we can control the clouds that float along the Heavens, or the “wind that bloweth where it listeth.”

CLINICAL REVIEW.

VI.

SOME CASES OF AMAUROSIS TREATED BY STRYCHNINE.

[Reported, by Dr. HEATHCOTE, from the Royal Infirmary of Edinburgh.]

IN September, 1826, M. Lemberg read his “*Essai sur le Methode Endermique*” before the Royal Academy at Paris. This essay consists of experiments with various medicines applied externally upon blistered surfaces, or by injection into the cellular substances. Amongst others, the vegetable alkali called strychnia (being prepared from the *strychnos nux vomica*) was successfully employed in a case of hemiplegia following apoplexy, and its more violent and injurious effects restrained by the same application of the narcotic principal of opium.

From this Essay, I believe, Dr. Short conceived the idea of applying strychnia for the cure of amaurosis, and that conception has been attended with the most gratifying result; for, although few only have benefited, yet what success can a physician find more gratifying than to have restored sight to one blind, and opened the way for others to remove so calamitous an affliction? Having stated the occasion which led to the use of strychnia in these cases, I have only to show its mode of preparation, and the manner in which it has been applied, before I proceed to the cases themselves.

The powder of the *nux vomica* is first boiled in water, and the decoction evaporated until

it acquires the consistence of syrup; lime is then added, which, uniting with the acid, liberates the strychnia, which may then be separated by means of alcohol, in which it is very soluble, and may be obtained by crystallization.

To apply it:—a small blister, about the size of a crown-piece, is first put upon the temple or forehead, and upon which, having risen, and the cuticle being removed, 1-4 of a grain of strychnia, finely levigated, is dusted, and a piece of simple dressing is placed.

I now proceed to detail those cases in which this remedy so applied, has been attended with any benefit. But, with regard to the majority which have not been benefited, in order to save the time of my readers, I have arranged their cases in a table, which embraces all the particulars of interest; their similarities and differences, in a short a compass as possible.

Case 1. Peter Hamilton, æt. 22, an iron founder, admitted June 16th, 1829. Can only distinguish light from darkness. Both pupils are much dilated, the right more than the left. The iris in both is sensible to the stimulus of light. The eyes are clear, and, with the exception of a slight squint, present a natural appearance. This state of vision has continued nearly the same for two years. His account of its commencement is as follows.

Having been for some years daily working under exposure to the heat and light of an iron-founder's furnace, he became affected with indistinctness of vision, accompanied by flashes of light when looking at minute objects, or when stooping. This indistinctness became gradually more and more obscure for 15 months. At the end of this time he could only distinguish light from darkness, and has remained in that state nine months. His general health had all along been quite good.

17th, (1st day.) The temples were shaved, and $\frac{1}{2}$ of a grain of Strychnia, dusted the next day on each side.

The next report I find, was made six days after this, and is as follows.

23rd June (6th day.) Within the last week a blister has been twice in succession applied to each temple, and to the raw surfaces, first $\frac{1}{2}$, then $\frac{1}{4}$, and to-day, $\frac{1}{2}$ a grain of the powder of strychnia.

This improvement has been progressive from the state of distinguishing only between light and darkness to the perception of the particular finger or number held up between him and the window. The pupils are less dilated and the iris readily contractile—strabismus is almost gone—tongue rather foul—bowels open.

24th. (7th day.) Blisters were renewed.

25th. (8th day.) Can to-day distinguish colours pretty readily, especially with left eye; the iris of which is less sensible than that of the right— $\frac{1}{2}$ a grain was applied on each temple.

26th. (9th day.) Still continues to improve, and can distinguish yellow and red colours—some headache, and tongue much loaded, and white— $\frac{3}{4}$ of a grain to each surface, a cathartic mixture.

27th. (10th day.) Less headache—sight considerably improved, for he can distinguish print from writing—one grain applied to each surface.

28th. (11th day.) Vision more distinct. Had an additional grain and $\frac{1}{4}$ yesterday.—Had $\frac{1}{2}$ on each surface.

20th. (12th day.) Blistered surfaces have healed.

July 2nd. (15th day.) Had $1\frac{1}{2}$ grains on the 30th. On the 1st an attack of rigors, debility, sickness, vertigo, and headache, which are now gone, but feels weak. Can now clearly distinguish objects placed at the distance of some paces, and reads easily the hour upon a watch, by evening twilight—iris of both eyes quite sensible. Internit strychnine.

4th. (17th day.) Sight still further improved. Renew the blisters and $\frac{1}{4}$ grain of the powder.

13th. (26th day.) Can now distinguish objects clearly at considerable distances.—Pupils continue more contracted, although less than naturally. Strychnia from $\frac{1}{4}$ to $\frac{3}{4}$ of a grain, has been applied as before,

26th. (39th day) Strychnia has not been applied since last report, from a sensation of violent heat over the skin.

Aug. 4th. (48th day) Since the last report, two grains have been applied to each temple, without any obvious effect. But improvement in vision continues.

16th. (56th day) Has had two grains on each temple for eight days. Repeat blisters, and apply $2\frac{1}{2}$ grains to each surface.

Sept. 8. (79th day) Since the last report he has been applying the strychnia every day, from 2 to $3\frac{1}{2}$ grains on each temple without any constitutional effect, but with continued improvement in his sight. There were some days of intermission when the blisters were obliged to be removed. Yesterday left the infirmary, and attempted to work, but found that the act of stooping occasioned dimness of sight, and he returned the next day, and resumed the strychnine to the extent of three grains on each temple, and continued *ijss* to the 13th. It was then altogether omitted, and on the 31st, the report is, that he could see perfectly, and he was ordered to apply the vapour of ammonia for a few days; the eyes appeared quite natural, the squinting gone, and he was enabled to tell the time upon the iron church clock, from the infirmary windows.

Case 2. Andrew Drummond, æt. 34, a ship carpenter, admitted Oct. 2nd, 1829. This patient can only distinguish light from darkness, a window from the wall. The pupils of both eyes are rather contracted, and there is but little sensibility of the iris. In the left eye there is a ring of opaque substance, the remains of a cataract, the centre of which was removed by an operation; but although the light was thereby admitted, he was still unable to see. This ring can only be observed when the pupil is dilated. This state of vision, with little change, has continued six years. His account of its commencement is as follows.

He had been employed as a flax dresser, six months before he was attacked with fever at Dundee. This was about six years

ago. But some weeks previous to this attack, dimness of sight had gradually come on, and then, during the delirium of fever, his sight was totally lost, and likewise his hearing.

During his convalescence he regained his hearing, but remained nearly quite blind. Sometimes, however, distinguishing light from darkness. A year after this he was admitted into the infirmary, had the centre of the cataract removed from the left eye, was blistered, and had ætons, both in the nucha and in the inside of the arms. But he left the hospital without receiving any benefit to his sight. Two years since he returned to the house, underwent medical treatment, took mercury, renewed his blisters and ætons, and left the house again, without any distinct improvement, but only thinks he saw a little more clearly. He has since his fever enjoyed good general health.

Oct. 3rd. (1st day) A blister having been applied to the right temple, yesterday $\frac{1}{2}$ of a grain of strychnia was dusted upon the raw surface, the cuticle being removed, and states, that he saw a little with the right eye, about six hours after the application, and that almost immediately after, he felt a shooting pain across his forehead, but no other sensation—one grain to be applied.

5th. (3rd day) Says he did not feel the application of the whole grain so much as the first $\frac{1}{2}$, but thinks his sight still improved—full diet—blisters renewed.

7th. (5th day) One grain since last report. Can now distinguish large from small letters—some vertigo last night; $1\frac{1}{2}$ grain, and aqua ammoniac.

10th. (8th day) Since last report a fresh blister, and three grains have been applied as before. Secs the iron church steeple from the window, and distinguishes the colours of the ward, which he could not do yesterday—one grain as before, and a cathartic mixture.

13th. (11th day) Since the 8th, $2\frac{1}{2}$ grains have been applied; noticed yesterday, with his left eye, the bars of the window—two blisters have been since applied, and have risen well; strychnia omitted yesterday.

and no further improvement in sight—apply 1½.

18th. (16th day) Five grains since the 13th, and a renewal of the blisters—complains of the light affecting his eyes, which he had not experienced before.

22nd. (20th day) Three grains since the 18th, with alternate blisters on each temple. Can to-day see men walking at a distance, which he could not do yesterday.

Nov. 7th. Since 22nd, 19½ grains have been applied, at most two grains and ½ at once. His sight gradually improving, and the intolerance of light removed entirely. Strychnia has been intermitted, and his appetite improved by the tincture of calumba. He can now see (11th Nov.) to read the hour upon a common watch—but he cannot yet distinguish small print.

Case 3. William Smith, æt. 31, a mason, admitted October 13th, 1829. The pupils are not much dilated, and the iris, though sluggish, is sensible: over the left cornea there is a slight muddiness. The eyes are in other respects natural. He can only distinguish light from darkness, but the left eye is more dark than the right. This state of vision has continued, with one period of improvement, about 12 years. His account of its commencement is as follows:

Twelve years ago, while going to his work, as a mason, he perceived a dimness in his sight, as if he were looking through smoke (according to his own description). In three days from this time he became quite blind; and cannot assign any cause for it, his general health having been quite good. Blisters were kept open, on his temple, without effect. About a year afterwards, in the Autumn, his sight partially returned, so that he was enabled to shear, by strong day light, but was obliged to be led home in the evening. Since which time he has been blind as described, and used no remedy.

16th. (2nd day) Quarter of a grain of strychnia was applied yesterday to the raw surface of each blistered temple. No change in sight—sensation of metallie taste an hour after the application of the powder—had

pain also in the balls of the eyes—bowels regular.

22nd. (8th day) Since the last report, has applied 8 grains—1½ daily, and a blister alternately to each temple when necessary to keep the surface raw. Had slight headache yesterday, and a pricking sensation in his arms and legs.

28th. (14th day) Since the last report, has applied with increase or diminution daily, according to the constitutional effects 8½. Forehead to-day is swollen, and the pricking sensation is felt to the finger's ends—intermit strychnia. Thinks that both eyes are slightly improved, but nothing more definite can be stated.

Nov. 1st. (18th day) The swelling of the forehead being removed by the intermission of the powder for two days and the bowels opened by cathartic mixture—he resumed its application on the 30th, beginning with ½ a grain, the next day ¾. Can now see the bars of the window, and observes the book before him, which he has never done before—says that his eyes feel stronger.

5th. (22nd day) Went out into the street, and could perceive people approaching him, which before he was unable to do. Has had since the last report, 3½ grains.

10th. (27th day) Since the last report, 2½ grains have been applied without any obvious general effects. Can now see below him for the first time, and distinguishes articles placed upon the table, and is able to direct his hand to them—nebulous appearance of the left cornea continues—strychnine intermitted, there being none in the infirmary.

Since these cases were read before the Physical Society of Edinburgh, a few instances of the success of strychnine in amaurosis have, I believe, been published; and some remarks have been elsewhere made upon the efficacy of the remedy. But these related facts and remarks do not appear to me to have been embodied in sufficient force to arrest the attention of medical practitioners: and there remains no prominent exhibition of amaurosis, treated and cured by

CASES OF AMAUROSIS TREATED WITH STRYCHNINE.—Royal Infirmary, Edinburgh, Oct. 1829.

NAMES.	Age.	Trade.	Time Blind.	State of Eyes. Right.	State of Eyes. Left.	Pupils.	Iris.	Eye-ball.	Causes and Mode.	Remedies.	Changes	Quantity of Strychnine and its Effects.
John Sinclair,	20	—	Infancy	Sees it. from dark	Quite blind	Much dilated	Contractile	Trembling	Born,	—	None	5 grains and 1 gr. without any effect, in 5 days. D.
John Kennedy,	18	None	15 years	Cataract	Sees to guide	Natural	Contractile	Trembling	Measels.	Medicines.	None	6 grains in 5 days without any effect. D.
And. Henderson.	26	Weaver	6 years	Quite blind	Quite blind	Much dilated	Insensible	—	Headache & ophthalmia going	Bled—bilateral	None	7 grains in 5 days without any effect. D.
John Pringle,	17	Weaver	6 years	Sees light from darkness	Sees to guide	Contracted	Contractile	—	Headache, sight failed in 4 months	Blisters and Collyria	None	3 grains in 3 days caused giddiness and tremors—3 more—no effect. Oedema of eyelids. D.
John McKee,	24	—	20 years	Do. do.	Quite blind	Contracted	Insensible	—	None. Gradual dimness	4 cat. removed from each eye	Slight, but relapsed	2 and half grains in 5 days, (one omitted.) No effect. D.
George Galt,	16	—	6 years	Sees to guide	Quite blind	Contracted	Sluggish	—	Head-ache from blow	—	None	2 and half grains in 5 days (one omitted) head-ache—look 3 grs. more—iris more sensible—vision improved—7 grains more in 7 days—no effect. Int.
John Gibson,	32	—	22 years	Light from dark	Light from dark	Much dilated	Insensible	—	Gradual dimness	Blist.	No change	4 and half in 4 days—no effect.
Alex. Millar,*	15	—	5 years	Light from dark	Quite blind	Dilated	Contracted	Tremulous	Hydrocephalus grad. in 7 months	Bled, blistered repeatedly	None*	Half a grain 1st day—head-ache bearing but no sight—5 grs. more in 4 days, no effect—1 gr. more behind the ears—no further effect.—Omit.
William Grieve,	45	Groom	—	Obscure	Opaque	Natural	Contractile	—	Left eye sudden right cataract.	Cat. removed, various	None	7 1-gr. grains in 7 days without any effect. Do. by desire.
Thomas Lamb,	44	—	31 years	Can just guide himself	Can just guide himself	Natural	Contractile	—	Fever—blind during delirium	Slight Improve ment	None	Half-grain caused pricking, vertigo, debility, headache—1-gr. more, after 5 days—return of headache and faintness. D.
Peter Hamilton,	22	Iron-founder	22 years	Light from darkness	Light from darkness	Much dilated	Sluggish	Squint	Gradual dimness	Collyra	None	About 2 grs. in 6 days, progressive in eight—9th day, after 1 grain more, head-ache—lith day, rigors, sickness, vertigo, told the hour by the watch.
And. Drummond,	34	Carpenter	6 years	Ditto	No. and ring of cataract	Contracted	Sluggish	—	Dimness with loss in fever	Blisters—actions more, and lued.	No permanent	1-gr. grs. after 6 hours gave some sight, with headache across forehead—2 and gr. grs. more—vertigo, great improvement in sight.
William Smith,	31	Mason	12 years	Ditto	Do. cloudy	Natural	Sluggish	—	Dimness in three days lost.	Open blisters	One nature, slight lupp.	1-gr. grs.—head-ache, pains in eye-balls. After 18 gr. more & frequent constitutional symps. much improvement in sight.

strychnine, to which medical men may refer, to encourage the attempt in future cases, and to warrant the probability of success.

I think the foregoing cases will supply this desideratum; and when it is known that two additional instances of success, one before and one since the date of these reports, have followed the same treatment, we are justified in encouraging and continuing this mode of cure.

It should be remembered that the use of this remedy proved injurious in no case where it was not unattended with success.

A slight degree of sickness, giddiness and headache, with twitching of the limbs, were the general symptoms complained of. In one case erysipelas of the face occurred, which immediately subsided upon the omission of the strychnine and the use of opium, which is its proper antidote. It is remarkable, too, that in most of those cases where this remedy proved ineffectual, very slight or no constitutional symptoms were produced. One abandoned it through fear—others from impatience. It will be seen, also, by a reference to the table, that the deafness, though not the sight, was alleviated in one instance by its application. All three cases, with one exception, were taken from the Blind Asylum in Edinburgh.

There is one more circumstance attending the use of strychnine in this manner which it is necessary to observe, and that is, that there are individual constitutions which exhibit very opposite symptoms to those generally produced by this medicine. A gentleman at Bristol, whom I attended, had been afflicted with amaurosis, combined with cataract, and had been blind for two years. This gentleman had applied to his temples about seven grains of strychnine in the usual way before any effects manifested themselves; and then, instead of the usual exciting effect, he was seized with numbness and immobility of the lower extremities, which gave way to a few doses of opium and aperient medicines.

Note by the Editor.

In the Medical Gazette, five cases are reported from the Westminster Ophthalmic Infirmary, treated on the above plan. In one case out of the five, where the amaurosis had lasted nearly two years, "evident and considerable benefit" ensued. In the other four cases no improvement resulted. Still, in a disease so nearly hopeless as amaurosis, the prospect held out by Dr. Heathcote's and Mr. Guthrie's experiments is not to be contemned.

VII.

ST. GEORGE'S HOSPITAL.

DISEASES OF THE CHEST

THE following cases will not, we hope, be devoid of interest at the present time, when diseases of the thoracic viscera are attracting so much and such deserved attention in this country. The advance which has been made within the last half century, in our precise notions of organic changes, is nowhere more conspicuous than in this class of complaints; for even under the masterly hand of Cullen, they were still involved in that obscurity and confusion which characterizes a rude and early stage in the progress of medical knowledge. This may appear a staggering assertion, but we confidently refer to the works of that able master for proof of its correctness. In dedicating a few lines to pericarditis, he observes, that it hardly requires a particular consideration: being almost always a part of the pneumonia he has described: not always distinguished by any different symptoms, or if it be, not requiring any different treatment.—The errors of this statement, both of omission and commission, are so flagrant, that we need not go further to demonstrate the great hiatus that exists, between the pathological knowledge of those days and the present.

Unprejudiced persons must allow, that the stride we have taken in this department is mainly owing to the labours of the French, and the cultivation of morbid anatomy. It may be galling perhaps to our national feel-

ings, to be indebted in so great a degree to foreigners, but science, ability, and industry are not the exclusive growths of any clime, nor the only offspring of any institutions. The advantages possessed by the hospital physicians on the continent in the examination of the bodies of the dead, have been so far superior to our own, that we cannot be surprised at the results in favour of the former. Fortunately our opportunities of treading in the same path are no longer limited, and our taste for this species of information has undergone a sensible improvement. At this splendid hospital almost every body is inspected after death;—the exceptions to the rule are so rare, as not to be worth calculation. By insisting on an examination as a matter of course, very little obstruction is thrown in its way by the friends of the deceased, who, on the contrary, are generally anxious for its performance. We believe it has been hinted that the plan is attended with some disadvantages; as patients are constantly admitted in the latter stages of organic maladies, and swell to a seemingly great amount the annual ratio of mortality in the institution. This circumstance has been laid hold of by the malignant knaves that infest the medical press, and twisted and tortured into accusations against the attainments of the medical officers. The charge carries such palpable absurdity on its face, that we are almost ashamed of noticing the maligners. We had rather, ten thousand times, expose ourselves to their devilish enmity, than do what is rumoured to be done at some establishments:—discharge patients whose recovery is hopeless, in order to keep down the number of deaths within their walls. Such a mode of proceeding may square with the dictates of worldly wisdom, but science is the sufferer; and is humanity a gainer?

To render the stores of information which a large hospital contains, beneficial in some degree to those who have not such opportunities of acquiring it, is the proper aim and object of reporting. There is much that can neither be communicated by writing nor by words, but there is likewise much that can;

and our business is with the latter. Perhaps there is no point on which the practitioner who sees little of morbid anatomy, requires information so much as on the subject of diseases of the heart and lungs. The change which the introduction of auscultation has made in their investigation is undoubtedly great, and when this means of diagnosis shall come to be more generally practised and understood (for it frequently is one without the other,) we anticipate favourable consequences to the public and the profession. One object of the present report is to shew the accuracy which the stethoscope, in most instances lends to diagnosis.

We propose to detail five cases:—two of empyema, in one of which the operation of paracentesis thoracis was performed—two of fungus hæmatodes of the lungs—and one of pneumo-thorax. We shall commence with the cases of empyema.

I. EMPYEMA.

Case 1. Scarlatina—Empyema—Suppuration in the Hip-joint—Death.—Christopher Rolfe, a clerk, æt. 26, admitted January 11, 1830, under the care of Dr. Hewett.

Complaints of frequent short cough—expectoration scanty, and “cannot be brought up”—dyspnœa—pain under lower third of sternum increased by deep inspiration or cough—cannot lie on right side—pain across right loin, not increased by pressure. On the surface of the belly a slight efflorescence like scarlatina—posterior surface of throat, uvula, and tonsils, of vivid red colour and tumid, pulse 133—tongue red and aphthous, but moist—bowels opened by medicine.

Ill since Christmas-day, when he was attacked with all the symptoms of severe cold and cough, of which he has never got rid. Has made great exertions of mind and body during the last week. Pain in the chest has been present for five or six days, dyspnœa rather longer. Has only been confined to the house, and had medical advice for three days—has been purged and bled yesterday

to about a pint, with temporary relief to the pain in the chest.

A gargle, infusion of roses and salts, and cupping, if the skin should become warm, were the means prescribed by Dr. Hewett.

On the next day he was examined by the stethoscope and percussion. The right side of the chest, below the third rib, was as dull as lead, upon percussion, but above that rib the sound was more natural. In the part which sounded so dull the respiration was scarcely heard; beneath the clavicle it was *puerile*, and towards the spine it was *bronchial*. Over the middle and lower parts *ægophony* was perfectly distinct. The left side of the chest sounded very sonorously throughout, and the respiration was *puerile*. On pressing the intercostal spaces in the upper part of the right side, the patient complained of much pain. There could be no hesitation in forming the following diagnosis:

Considerable effusion from pleurisy in right side of chest, and compression of the lung towards the spine and mediastinum. Left side healthy.

Fourteen leeches and a blister were immediately applied, and on the 13th the patient was ordered cal. gr. ij. every six hours. On the 16th, being free from pain, the mercury was omitted, and as the strength was much reduced, a light draught with dilute sulphuric acid was ordered. On the 17th the cough was constant, *dry*, and troublesome—there was some little puffiness of the abdomen—the patient *lay upon his back*. The calomel pill was resumed at night, and a blister was applied. On the 19th tr. digital. ℥. v. were added to each draught. On the 20th, the patient preferred lying on the affected side. The sacrum beginning to be sore from pressure, was defended by plaster, and on the 1st of February the following is the report: sleep less disturbed by cough, no expectoration—lies always on *right* side, because when he turns on the opposite he instantly begins to cough—right side of chest universally dull on percussion—sweats much at night—gums not affected—pulse 108, feeble, and occasionally intermitting. On

the 5th he was ordered five grains of blue pill with ipecacuan and half a grain of opium every night, and a mucilaginous mixture with a little digitalis. His other medicines were omitted.

On the 6th some more leeches and a blister were applied; an abscess formed over the sacrum and was opened, and the patient now began to complain of some tenderness on pressure in the region of the liver, with a little puffiness of the abdomen. There was also a tendency to diarrhoea. *ægophony* was only perceptible immediately beneath the clavicle and high on the right back; it had vanished from the parts below that level, a sure proof of the increase of the empyema. The acetate of morphia in doses of $\frac{1}{4}$ of a grain were tried, in order to procure sleep; but although it answered pretty well at first, its operation was not steadily beneficial. To determine to the kidneys, Dr. Hewett gave a trial to the acetate of potash, a diuretic much lauded in these cases by Laennec. From the dose of 3i. at night, it was gradually increased to 3iiss three times daily, but no diuretic effects could be obtained, a profuse diaphoresis with an urinous smell supplying its place. The tenderness in the hepatic region continued, with the disposition to diarrhoea. On the 9th of March there were a few clear straw-coloured sputa for the first time; the symptoms otherwise were much the same. Antimonial plasters and a blister had been employed since the preceding report, and occasional symptoms were met as they arose.

On the 13th he was suddenly attacked with a roseola-like efflorescence over the surface of the body, headache, and some pyrexia. Effervescing draughts were ordered; he rapidly became very low; the breathing grew fearfully hurried and oppressed, and at 12, p. m. of the 15th he expired, his senses remaining perfect to the last moment of existence.

SECTION CADAVERIC. Body much emaciated.

Thorax. Nearly a gallon of purulent fluid in the right pleural cavity—pleuræ themselves coated with thick yellow lymph,

arranged on the surface of the costal pleura in a remarkably honey-combed manner. Diaphragm on this side thrust downwards by the empyema. Lung compressed to the utmost against the spine and mediastinum, its antero-posterior diameter not exceeding two inches and a half; its lateral diameter very little more than one inch. In structure it was *carnified*, and of blackish grey colour.* Bronchi on this side remarkably small, and soon lost in the impervious lung.

Much serous effusion in the upper lobe of the left lung, and something like recent peripneumonic engorgement in the lower. Mucous membrane of the bronchi congested—some muco-purulent matter in the larger tubes on both sides of the chest.

About two ounces of clear serum in the pericardium.

Abdomen. Some flakes of thick yellow lymph on the convex surface of the liver, and adhesions of no ancient date between it and the diaphragm. Liver forced down very low by the empyema. Mesenteric glands a little enlarged.

Cranium. Not examined.

In the left hip-joint was a collection of curdy pus, and the head of the femur was partly dislocated on the dorsum ilii.

CASE 2. Pleurisy—Empyema—Paracentesis Thoracis, &c.—Death.†

William Smith, a servant, ætatis 23, admitted February 10th, 1830, under the care of Dr. Hewett.

Pain at the scrobiculus cordis and lower part of the left side of the chest, aggravated by cough, and by inspiration, which is im-

perfect and abruptly checked—pain in the left shoulder—decubitus on the left side—troublesome cough without expectoration—aspect pallid and phthisical. Pulse 108, rather small—skin perspiring much at night—tongue loaded and whitish—bowels opened by medicine.

Caught cold a month ago, and was seized with pain to the left of the ensiform cartilage. He neglected his illness for four days, when he was bled, blistered, &c. and the pain disappeared. A dry cough alone remained, but a fortnight ago this was nearly gone. Ægophony being present in the left side of the chest, a blister was applied, notwithstanding the apparent cure. Five days ago had a relapse preceded by rigor, and has since suffered from the present symptoms. Has not been subject to coughs, nor, according to his own account, is there any phthisis in his family.*

Leeches—blister—salines with digitalis.

On examination next day with the stethoscope and percussion, the dull sound was present in the posterior and inferior parts of the left thorax, as high as the inferior angle of the scapula, and ægophony existed to the same extent. It was obvious that there was effusion.

V. S. stat. ad 3 viij. vel. x. Hyd. sub. pulv. ant. ʒā gr. ij. 6tis hor.

He was temporarily relieved by the abstraction of blood, and leeches were applied. Opium was added to the pills, but they gripped the patient, and on the 13th, pil. hyd. ʒss. was given thrice daily in their stead. Leeches were repeated, and shortly followed by a blister. On the 18th the digitalis was omitted, and on the 20th the blue pill, but the gums were not much affected. The cough being very troublesome at night, the acetate of morphia was tried without success. The chief symptoms now were, a very annoying dry cough, most distressing at night—more or less of hectic fever—hur-

* Carnification of the lung is the result of compression, and differs toto cælo from hepatisation, the consequence of inflammation. For the more detailed explanation of this state, we refer to M. Laennec's treatise.

† This case has appeared in our respected contemporary, the Medical Gazette: as we were in possession of the details quite as early as our brother editor, we shall be fully acquitted of plagiarism on the occasion.—*Ed.*

* This statement proved eventually to be untrue, a younger brother having died of consumption.

ried breathing—occasional pain in the left side of the chest—and a disposition to looseness of the bowels. On the 3d of March a little straw-coloured matter appeared for the first time in the spitting pot. A blister was applied and the surface dressed with mercurial ointment, and conium was given freely, with some good effects in allaying irritability. He was put on the *mistura menthæ acida*, a light tonic. On the 15th the sputa were thick, muco-puriform, globular, and in trifling quantity; the weakness was very great. On examining the chest the left side was almost universally dull on percussion, and by measurement was about an inch less in size than the right. He now also began to suffer flying pains in the right side and shoulder.

On the 21st he was examined by Dr. Hewett, who queried *pectoriloquy* between the 2d and 3d ribs on the right side. The left side was universally dull on percussion, and the ægophony had mounted upwards. The effusion had increased much on this side.

We need not particularize the items of treatment—suffice it that it consisted in gentle anodynes and moderate support. On the 8th of April the disease might be said to have reached its acmé; the ægophony had mounted to the top of the left thorax—scarcely any respiration was heard in that side, which measured half an inch more than the other—the intercostal spaces were on a level with the ribs—the heart was seen pulsating to the right of the sternum. With regard to the right side, it was generally resonant, the respiration was puerile, the voice bronchial, and doubtful *pectoriloquy* existed under the clavicle. The diagnosis entered was:—

Abundant empyema in left pleural cavity—tubercles in other lung.

On the 6th of May we find that he had been free from any expectoration for several days; but on the 11th it returned, although trifling in quantity and in quality the same as before. During this time the dimensions of the left side of the chest perceptibly diminished, and afforded such a gleam of hope that Dr. Hewett deferred proposing an operation.

On the 23d, however, a repetition of the measurement showed an excess of 1 and 3-8ths of an inch in favour of the left side; and the heart was felt, heard, and seen to be pulsating under the left nipple. It was now too obvious that nothing short of *paracentesis thoracis* afforded the most distant chance to the unfortunate patient. The question of the existence or non-existence of tubercles presented itself to Dr. Hewett's mind. The aspect was phthisical, and the stethoscopic indications supplied by the right side of the chest, were to say the least of them, suspicious, for doubtful *pectoriloquy* existed in the upper lobe of the lung. In opposition to these forbidding circumstances, the patient denied the existence of phthisis in his family, and the sputa had never been tubercular. To this point Dr. H. had directed his most anxious attention, and on no one occasion had he observed in the expectoration so much as presumptive evidence of tubercles. As the leaning of justice is, or should be, towards mercy, so the leaning of the medical man should be towards hope; and after maturely considering the arguments on both sides, Dr. Hewett decided on proposing the operation of *paracentesis thoracis* to his colleagues. Neither being hostile to the measure, it was performed by Mr. Brodie on the 26th of May.

Previous to puncturing the chest, a grooved needle was introduced between the sixth and seventh ribs, on a vertical line descending from the axilla, and some thin purulent matter drawn off. Assurance being thus made doubly sure, the operation was completed in the same spot; about four ounces of purulent whey-like fluid permitted to escape and an elastic tube introduced into the opening, and allowed to remain, its outer extremity having been closed with a plug; by the occasional removal of which, the quantity of fluid discharged might be regulated, and the entrance of the atmospheric air prevented by its replacement.

In the course of the night he suffered for a short time from a little pain in the left side, and was prevented from sleeping by

frequent cough. Next morning he was free from any untoward symptoms, and about a pint and a half of matter had escaped since the operation.

Haust. Nitri, c. Tr. Hyosciami. gr. j. 6tis hor.

29th.—About sixteen ounces more fluid have been discharged—in all, about forty ounces. Has a little pain and much tenderness on the left side, aggravated by cough, which is troublesome; pulse small, soft, rapid. Respiration, accompanied with mucous rattle, *is distinctly audible anteriorly and superiorly on the left side.* Slight ægophony below the axilla; dull sound still upon percussion. Heart felt, and heard more distinctly on the left side than on the right.

The flexible tube was withdrawn in the night, as it occasioned uneasiness. No more fluid had escaped, and the entrance of air by its sides, where ulceration was beginning, was apprehended. On the 30th the respirations were 28 per minute; pulse 133, very soft, and feeble; tongue rather furred at the base.

The respiration was audible, but distantly, as far as the inferior angle of the scapula; and the dull sound on percussion had disappeared anteriorly and laterally. The heart pulsed in its right situation; one mass of viscid muco-purulent sputa in twenty-four hours.

He was now ordered moderate support, with wine and sulphate of quinine &c. and from the date of the last report to the 7th of June, there was little alteration for better or worse; the cough was still troublesome, and there was rather more muco-purulent expectoration. On the latter day the respiration was found to be less distant than before; the sound on percussion was a little clearer; and the left side was now an inch less by measurement than the right. On the 8th, the flame of a taper being applied to the wound was not agitated during respiration—a little serum only oozed out. Four or five ounces of muco-purulent matter had been expectorated in the last twenty-four hours. On the 9th, aphthæ appeared on the tongue; and in the morning of the 12th the patient complained of having suddenly felt

air issue with a gurgling noise out of the orifice, whenever he coughed. Serum also oozed out in abundance; and both were most horribly offensive to the smell, blackening the plaister, and having all the characters of sulphuretted hydrogen. The flame of a taper applied to the wound was driven forcibly away on coughing, but not the least was drawn inward upon inspiration. The left side of the thorax was *preternaturally resonant.*

Next day no respiration was heard on this side, and the metallic tinkling, the pathognomonic sign of pneumo-thorax, was so distinct as to be heard by many persons quite unacquainted with auscultation. At 10, a. m. of the 15th the patient died.

NECROPSIA:—12 hor. post-mortem.

Body much emaciated; left side of the chest resonant, like a drum. Prior to opening the thorax, the nozzle of a pair of bellows was inserted into the trachea, and on inflating the lungs air was propelled from the fistulous opening in the left side.

Thorax.—About two pints of sero-purulent fluid in the left pleural cavity: this occupied its dependant half; the remainder was occupied by air. Pleura itself, and the costal in particular, extremely vascular and flocculent, lined with false membrane, of varying thickness, and with "concrete pus;" the greater part was in the neighbourhood of the fistulous opening. The lung was much compressed, its structure grey-coloured, and not yet carnified, and a few miliary tubercles existed in it; at the apex was a vomica, scarcely larger than a Barcelona nut, communicating, by a small round opening, (the edges of which were lined with soft lymph,) with the pleural cavity. The vomica again communicated with the superior great division of the left bronchus, by means of a ramification of tolerable size.

Right pleural vascular in parts, and in parts united by adhesions of various dates; no fluid whatever in this side. Its surface both costal, pulmonary, and diaphragmatic, studded with minute, pearl-like, tubercular accretions. Lung itself not collapsing, studded with many soft, common tubercles.

in its superior lobe, with miliary tubercles in its inferior, but comparatively free from either in its middle lobe. At the apex of the lung several honey-comb vomicae, of small size, communicating partly with each other.

Abdomen :—Several ulcerations of the mucous membrane of the intestinum ilium, near its termination. Ulceration also of the valve of the cæcum, and large patches of the same in the ascending part of the colon. Mesenteric glands enlarged, as they often are in phthisis, rather cheesy in consistence, and in one or two instances suppurating in their centre.

Cranium :—Not examined.

The two preceding cases are severally excellent specimens of empyema arising from different causes, or rather in different habits, and running a different course. In the first, it followed an attack of neglected pleurisy, and was totally unconnected with tubercular or other disease of the lung; in the second it was also produced by pleurisy, but the latter was combined with, if not dependent on, tubercular formations. For the modes in which the symptoms differed, and the points on which they agreed, we cannot do better than refer to the details of the cases themselves. We may remark that they shew very clearly the ordinary progress of a case of empyema. A patient gets a cold which he neglects, or an attack of pleurisy for which he is treated, and, if the former, he appears to be recovering: if the latter, to be convalescent. But the calm is delusive, the amendment fallacious; for a certain quantity of fluid has been effused into the cavity of the pleuræ, and the germ of his destruction is there. The symptoms denoting, or rather attending, this critical state appear to be;—a dry and more or less troublesome cough, some slight and flying pains in the affected side and shoulders, and, if the inflammatory action has been subdued, a disposition to lie on the same side of the body. In the first case there was tenderness of the intercostal spaces on pressure, and this is commonly a very valuable symptom of pleurisy. On using percussion the sound

will be more or less extensively dull, and on applying the stethoscope, ægophony will be heard for a limited extent. We have said that, if the inflammatory action has been subdued, the patient will be disposed to lie upon the side affected, and we wish to insist on the following rule with regard to the position of the patient, as one of the greatest practical importance, in determining a diagnosis:—so long as acute inflammation of the pleuræ remains, the patient will lie upon the opposite side; but as soon as the inflammation has subsided, or has assumed the chronic character, and effusion to any extent has taken place, he shifts his position and obstinately reclines on the side in which the fluid is placed. The reason is obvious. Whilst active inflammatory action is present lying on the side affected would be virtually applying pressure to an inflamed organ, and we know that this must be a source of suffering. But when once there is effusion, the latter by its weight would oppress not only the lung on its own side, but also on the other, unless the patient by lying on the same prevented these effects of the gravitation of the liquid.

As the effusion becomes converted into actual empyema, and as the latter increases till it fills the whole of the pleural cavity, the dull sound increases, the respiration becomes fainter and ultimately disappears; the ægophony mounts higher and higher; keeping pace with the progress and marking the border of the still augmenting fluid. At last the whole side of the chest sounds dull; ægophony is scarcely heard, the heart is distorted, the liver may be thrust down, peritoneal inflammation may even occur, hectic fever is set up, and the patient dies with many of the symptoms of phthisis pulmonalis. In the first case we have detailed, the expectoration was scanty to the last, and generally glairy mucus only.

We think the foregoing cases will shew the precision, with which the progress of the malady may be gauged and determined by percussion and auscultation. We do not assert that empyema can never be recognized without them; we know full

well that it can, and that it often has been so. But we contend that by their means the diagnosis is more certain when the malady is fully established, and we boldly maintain that, in the earlier stage, it is *impossible* to arrive at any definite conclusions, independent of the assistance they afford. Most persons in practice must have witnessed cases, in which empyema was found after death that was never suspected during life. We have seen such cases ourselves, nay more, we have seen them occur under circumstances, which rendered the chances of success from an operation by no means inconsiderable. We hope that they who have made such mistakes, and to our personal knowledge the best physicians have done so, will be slow in condemning auscultation.

The only point on which it remains for us to touch is the operation. The first case we have detailed was certainly more favourable for its performance than the latter.—The unsuccessful termination in that instance can neither be attributed to the dangers of the operation itself, nor to the empyema for which it was performed. Tubercles and vomica were the cause of the patient's death. We have heard that a hospital physician of this metropolis, has met with a success unparalleled hitherto, in the performance of the operation for empyema. It is said that a proportion of seven in nine, or thereabouts, have recovered in consequence of paracentesis thoracis. If this be so, the advancement of science and the interests of humanity demand that the cases should be published, in order that less fortunate operators should learn, and less bold physicians should not dread, the method of affording relief in these desperate cases. It may be prejudice, perhaps, but we fear the report has magnified the benefits derived by the gentleman to whom we have alluded, from paracentesis thoracis; and we look with a sorrowful incredulity on success so incomparably greater than has ever yet been obtained. The only mode of lulling doubt and dispelling scepticism, is to bring the cases before the profession, when all may read, and all may be convinced.

II. PNEUMO-THORAX.

Case 3. *Pneumo-thorax—death—tubercles, and small vomica in the lungs.*—James Smith, a footman, ætatis 21, admitted March 8, 1830, under Dr. Hewett.

Pain under the inferior half of the sternum, which is not elevated by inspiration—hurried breathing—some cough—no expectoration. Prefers lying on the *left* side, but is obliged to change his position frequently in consequence of the cough—no tenderness of the abdomen, nor pain of the head.—Pulse 140, very small—aspect pallid and strumous—bowels freely open.

Has been ill six days, but had a bad cold previously. Was suddenly seized in the morning of the 2nd, with severe pain in the lower part of the *right* side of the chest, for which he was bled to syncope on the following morning, cupped on the 4th, and bled again on the 5th. The pain was relieved by these depletory measures, but not removed, until after a second bleeding on the last mentioned day, since which he has suffered from weakness only. Has had none of the usual symptoms of fever; has been subject to winter cough; his mother died of a decline.

A blister, with calomel and opium every six hours, were prescribed by Dr. Hewett, and afforded a little relief to the cough.—On the 10th he was examined with the stethoscope, and the nature of the case rendered but too evident by auscultation and percussion.

The right side of the chest, anteriorly, was preternaturally resonant, from the clavicle to the inferior margin of the false ribs; posteriorly, it was also very resonant, but not to so great a degree. Throughout the right side the respiration was so distant as scarcely to be heard; near the mediastinum, just below the clavicle, and along the spine, it was louder and bronchial. In the latter situation, there was heard a remarkably stridulous, and almost metallic sound, accompanying the *respiration*; the voice gave bronchophony; and although there was no metallic tinkling, there was occasionally the *bourdonnement amphorique*. There could be no hesitation in pronouncing on.—

Pneumo-thorax of the right side, with liquid effusion the consequence of pleurisy.

With regard to the other side of the chest: the sound was not equally and universally good on percussion throughout—the respiration was peurile, in some parts even bronchial. These signs when coupled with the history, led to the diagnosis.

*Tubercles in the lungs—no evidence at present of actual vomice.**

These facts influenced Dr. Hewett's practice, for being thus assured of the hopeless nature of the case, he avoided calomel and all heroic measures; contenting himself with mild aperients, and effervescing draughts with the tincture of digitalis. The unhappy patient escaped the torture which a well meaning practitioner, not acquainted with auscultation, might have inflicted, in the shape of bolus, mixture, or depletion. If his malady was beyond the reach of art, if it passed the bourne of human skill, the able physician to whose care the case had fallen, was conscious, at least, that he avoided all unnecessary and mischievous interference. A genuine acquaintance with morbid anatomy may not always confer on us the power of curing, but it frequently will prevent us from scientifically killing.

On the 11th, the right side was found to measure $1\frac{1}{2}$ ths inch more than the left; and on the *Hippocratic succussion*, the splashing of a fluid was distinctly audible. No metallic tinkling—pulsation of the heart heard rather farther than natural to the left.—Pulse 120—respiration 32 in the minute—lies always on the *left* side— hectic.—On the 14th the lowest part of the right side was found to sound more dull, and the tintement metallique was distinctly heard by Dr. Hewett. This shewed that the fluid in the right side was increasing, and proved that the pneumo-thorax depended on a fistulous

communication of the pleural cavity with the bronchia.

Inflammation of the absorbents in the left arm, in consequence of the venesection practised before his admission, now set in, and proved a source of excessive anguish, and no slight detriment to the unfortunate young man. The cough was mostly troublesome, the sputa scanty and muco-puriform, the pulse rapid and rather vibratory. Occasional nausea was complained of, and profuse perspirations took place at night.—Small doses of the medicinal hydrocyanic acid were employed with trifling relief to the cough, and it was necessary to have recourse to opiates at night.

On the first of April we find that for several days he had suffered from a little pain in the lowest part of the right side of the chest, and the liver was found to be protruded downwards. The dyspnoea was very marked; the acrio-serous effusion too obviously increasing. On the 2nd the respirations were 40 in the minute. Night delirium set in, exhaustion made progress, the patient was harassed with pain in the right side, and much tenderness of the intercostal spaces on pressure, and early on the 4th of April he expired.

SECTIO CADAVERIS:—2, p. m. 5th. Right side of the chest more prominent than the left, particularly in the inferior part; and very resonant, except in the dorsal and inferior regions. Considerable emaciation.

Thorax. On puncturing the right side, a stream of air, not at all putrid, escaped. In that pleural cavity was upwards of a quart of green, but not very turbid, sero-purulent fluid. The space occupied by the air was to that occupied by the fluid nearly as $1\frac{1}{2}$ to 1. On inserting the nozzle of a pair of bellows into the trachea, and endeavouring to inflate the right lung, little, if any, such inflation took place, but air bubbled up through the fluid in the pleural cavity, apparently from an opening in the posterior part of the lung. The pleurae themselves were coated with "concrete pus," and presented at the apex and base of the cavity a few very long and firm bands of adhesions.

* It must be remembered that these conclusions were arrived at, and expressed, very long prior to the patient's death. The events revealed by dissection, will prove how true were the auscultic indications.

The diaphragm was pushed downwards, the mediastinum deflected towards the left.

The lung was compressed towards the spine and mediastinum, flattened, carnified. The opening through which the air had escaped was situated at the lower part of the middle lobe, very near the spine. It was larger than a pea in diameter, surrounded by soft lymph, and opened into a little vomica, capable of containing a small horse-bean. The latter communicated freely and directly with a large bronchial tube. The bronchi on this side were contracted in diameter.

Pleuræ on left side only shewing some firm adhesions at the upper part. Lung small; its upper lobe sprinkled with a few scattered groups of common tubercles. At the posterior part were two or three vomicæ, the size of small nuts, communicating with each other.

About an ounce and a half of greenish serum in the pericardium, with some flocculi of loose recent lymph.

Abdomen:—Some yellow serum in this cavity, with a little recent lymph between the liver and diaphragm, especially on the right side. Liver pushed down, but healthy, as were all the other abdominal viscera.

Cranium:—Not examined.

The left arm, in which the inflammation after bleeding had occurred, shewed serum and lymph in the cellular membrane; a small collection of pus over the external condyle, a minute carious spot on the condyle itself.

This case adds another to the two of pneumo-thorax which we have recorded, and which, as far as we know, are the only instances of the disease having been recognized in this country, during the existence of the patient. The reason is apparent;—without auscultation or percussion, it is physically impossible to ascertain its presence. We have seen two or three examples of the disease in the patients of physicians who did not employ auscultation; but it had not been recognized before death.

The history and progress of these cases are as follows:—A patient of scrofulous or phthisical aspect, labouring under what he

calls a cold, perhaps far advanced in phthisis pulmonalis, is suddenly attacked with violent pain in the side. This may be more or less subdued by remedial treatment, but considerable dyspnœa remains, there is a troublesome and nearly dry cough, the patient is disposed to hectic, and can only lie on the opposite side. And observe the difference in this respect between pneumo-thorax and empyema. In the latter, the patient lies on the side affected, for reasons we have attempted to explain, whilst in pneumo-thorax he invariably prefers the other. The reason appears to be obvious: air being lighter than fluid, so long as that is uppermost, comparatively little compression is exercised on the mediastinum or sound lung; whereas, if the patient were to lie on that side, the pressure acting on the thoracic parietes must be communicated nearly undiminished to those parts. We can, indeed, conceive, that when the fluid effusion in pneumo-thorax is considerable, its influence may preponderate over that of the air, and the patient recline as in empyema. Certain it is, that if inflammation attack the other pleuræ or the pericardium, the patient will change his position despite of the pneumo-thorax. Thus, a patient under Dr. Chambers,* having pneumo-thorax, lay as usual on the opposite side; but, being attacked with pleuritis in the latter, he changed his position so long as the acute inflammation lasted, when he instantly resumed his former posture. This happened several times, in successive attacks of pericarditis and pleurisy.

In addition to these general symptoms, which are obviously quite inconclusive in themselves, the patient has the auscultic symptoms of pneumo-thorax. These we need not specify farther than by saying, that with little or no respiratory murmur, the chest is exceedingly resonant on percussion, and the *bourdonnement amphorique*, or the *tintement métallique* exist, according to circumstances.

* Geo. Canning, whose case we detailed in a late Number.

The diagnosis being established, the prognosis is but too unquestionably gloomy. The only possible chance for the patient is from operation, and that can give scarcely a shadow of hope. In the immense majority of the cases of pneumo-thorax, the air has escaped from a tubercle or vomica bursting through the pulmonary pleura. Under such circumstances we operate for pneumo-thorax only to leave phthisis behind, a melancholy prospect for patient and practitioner. Still there is a period and a combination of circumstances, when paracentesis thoracis may not only be strictly justifiable, but absolutely called for. If the effusion has increased to so great a degree that the patient is in danger of suffocation, as was Mr. Cornish, we conceive that the physician must throw these ultimate considerations overboard, and neglect remote evils to administer present relief. The operation is a trifling one *per se*, its immediate consequences are very seldom fatal, the sufferings for which it is performed dreadful, the relief it affords both great and instantaneous. It must be remembered that pneumo-thorax is frequently produced by a tubercle giving way in a *very early* stage of phthisis: a stage which, if not susceptible of cure, is certainly far from being speedily fatal. In the case of Canning, to which we have alluded, there were comparatively few tubercles in the lungs, and in that of Mr. Cornish they were by no means abundant. On the whole, we should say that, in empyema, the operation is much more likely to succeed than in pneumo-thorax; in the former it may be curative—in the latter it is palliative only.

We find that we have not space for the cases of fungus hæmatodes, which we, therefore, defer until our next report. If the present has run to some length, we can only remark, in extenuation, that the subject is become one of extreme importance, and is ill understood in all its bearings by the mass of practitioners in this country. Our object, too, has been to impress on the minds of our readers the practical value of auscultation; and this being almost in its infancy here, we were necessarily compelled to dilate on

points, which, if generally comprehended, would require no explanation.

VIII.

WESTMINSTER HOSPITAL.

I. CASE OF EXOSTOSIS TREATED WITH MERCURIAL FRICTION AND TURPENTINE.

ANN ROGERS, æt. 20, admitted July 15th, 1829, under Mr. Guthrie, with swellings on the shin-bone of the left leg—she is a tall and tolerably healthy looking woman, her face seems rather to express a scrophulous habit.

She states about four years ago she caught a very severe cold—she was menstruating at that period, and the cold affected her very violently—she had pains in her head and back, her whole body ached and more particularly her legs, which pitted on pressure of the finger. She has never been quite well since that time—she is very positive in her assertion that she has never had any syphilitic affection. She is unmarried and lived as a servant. It nevertheless appears probable from collateral circumstances that there may have been some such cause for the swellings on her shin-bone. She suffers from continual pain down the tibia of the left leg, which increases in violence at night. It is about seven years since the catamenia commenced, and they have appeared at regular periods ever since. She attributes these swellings to having struck her leg against the stairs about the time when she first perceived them. She now complains of severe pain in the head and the shin of the left leg—pulse regular, 88 in the minute—tongue clean—bowels tolerably open.

R Hyd. Subm. gr. ij.

Pulv. Rhei, gr. xij. ft. pulv. bis in die sumend.

July 19th. For the last three nights three leeches have been applied on the swellings with some little benefit—Mr. Guthrie has ordered the following mixture.

R. Ol. Terebinth. 3ss.

Mucilag. q. s. ft. haust bis in die sumend.

23d. She complains of the medicine affecting her head—she is ordered the following plaster to be kept constantly applied over the tibia.

R. Ung. Hyd. Fort.

Ext. Belladonnæ, aa. 3i. ft. empl.

27th. She thinks she is worse since the application of the plaster—and that she felt more relief from the leeches than any thing else—she still complains of her head—Pil. Hyd. c. Col. gr. x. hac nocte—Haust. Aperiens cras mane.

August 12th. She has been rubbing in during the last ten days, and continues her medicine (turpentine) without much apparent benefit.

Aug. 29 She continues the mercurial friction—the lumps appear rather increased in size—complains of great pain in her head. C. c. nuchæ ad 3x.

Sept. 10. No change—mouth not sore yet. Cap. pil. hyd. gr. v. o. n.

Oct. 4. The gums are very slightly affected. The leg is much better, but though the mercury has not made her mouth sore, its deleterious effects on the constitution are evident—she is pale, thin, and out of health. She is ordered to discontinue rubbing in—pills, &c.

15th. Since she has desisted rubbing in, she has complained of some slight return of pain in her shin-bone.

20th. Ordered a belladonna plaster to the left leg.

24th. Complains of great pain in her head—C. c. nuchæ ad 3viij.

28th. Her leg is in less pain—the cupping relieved her head.

Nov. 2. Much the same.

R. Ol. terebinth 3j.

Tinct. lyttæ fl. x.

Mucilag. gum. acac. 5j. ft. tinct. bis in die sumend.

9th. The medicine produces great irritation in the urinary organs, but her head is not much relieved—belladonna plaster has been renewed.

10th. Pain in the head very great—C. c. nuchæ ad 3x.

16th. Irritation excited in the urinary organs has increased—she says she has passed blood—her head is much relieved.

24th. Severe pain in her head has returned from time to time, but upon the whole she is evidently much relieved. The tibia is much smoother and free from pain.

25th. She left the hospital to day at her own desire.

This is evidently one of those cases in which mercury, in whatever doses it may be employed, or however varied may be the mode of application, will not produce salivation. That it affected the constitution was, however, very apparent, and her health, after a time, declined rapidly, until its use was discontinued. She seemed at last, much benefitted by the turpentine combined with the tinct. lyttæ.

II. DISEASED TESTICLE.—EXTIRPATION—CURE.

James Thomson, æt. 32, admitted Dec. 23, 1829—with the integuments of the scrotum on the right side entirely destroyed, and a large irregular surface projecting out, which, on examination, proved to be the testicle. It is of a pale yellow colour, with here and there red granulations, and a few bands growing across. A red hollowed groove, leaving a white excavated edge, surrounds it. The surface of the sore is hard and not very painful on pressure.

Small pustules also have appeared within the last four days on the prepuce, and there now remain small white patches like flattened pustules.

He is a cabinet maker, and having lived in a wild irregular manner, he has suffered both from gonorrhœa and syphilis—repeatedly from the latter. About seven years ago he had a bubo. He traces the present disease back nine months, when he had a chancre on the gland—for which he made his mouth sore and applied the black wash—it healed in about a fortnight. Two weeks after this the testicle gave him great pain, and swelled to three or four times the natural size—he had six leeches and cold lotion applied, and since then, at intervals, several dozen of leeches—he did not however re-

main confined, but moved about with it supported by a suspensatory bandage—nor until a few days previous to his admission did he ever lay up.

About six weeks ago the skin appeared to be destroyed, and two or three small holes were observed in the scrotum, discharging matter—he had a poultice applied, and the holes gradually united and formed one large ulcer, from whence a very copious and offensive discharge proceeded—it has continued in much the same state up to the present time. He has generally enjoyed good health, with the exception of repeated attacks of syphilis. And during the whole of the last nine months, in which the disease has been advancing, he has felt very well, and suffered but little pain from the diseased testicle, except lately, that he has experienced a twitching, prickly sensation in the lower extremity of that side. His appetite has been good, and he has followed his business, till within the last ten days—he is pale, but not very unhealthy in appearance. His pulse is full, regular, and natural—bowels open; tongue clean.

Dec. 20. He continues his poultice, and suffers little pain.

Jan. 3. A powder, composed of equal parts of myrrh and lapis calaminaris, is ordered to be applied to the ulcerated surface daily.

10th. The appearance of the testicle is rather improved.

Feb. 10th. The powder has been applied daily, and the sore is much diminished in size—nearly one-half; it remains, however, much the same in character. General health unimpaired.

He continued in the same state until the 10th of April, when Mr. Harding proceeded to the operation for castration. A straight incision was made, which separated the chord from its sheath and divided it. In consequence of the adhesions produced by the disease, the testicle could not be separated from the scrotum, without the aid of the knife. Two arteries were taken up—and the hæmorrhage during the operation was very trifling—the edges were brought together with three sutures. About an hour

after he had been in bed—hæmorrhage came on, which could not be stopped without opening the wound, a large coagulum was then taken out of some ounces weight, and after a careful search, the cause of the hæmorrhage was found to be the arteria media scroti, very much enlarged. This was secured, and the bleeding entirely ceased. About a week after this there was considerable tendency to inflammation, which was relieved by leeches and cold lotion. The healing process then went on favorably—and the patient left the hospital quite well.

III. CASE OF TRISMUS TRAUMATICUS, ARISING FROM DECAYED TEETH AND COLD.

Caroline Lewis, æt. 24, admitted Dec. 21, 1829, under Mr. Lynn, with her jaws firmly locked, complaining of great pain in her head and neck. It appears that the jaws closed suddenly one afternoon, (three days before her admission) and resisted all her efforts to open them. She had suffered from a cold for a fortnight before, which had swelled her face inside and out, accompanied with most violent tooth-ache. From her earliest recollection she has been troubled with frequent and severe attacks of tooth-ache, scarcely ever a month free. She menstruates regularly, but scantily. Two or three of her side teeth are, fortunately, reduced to mere stumps, so that she can swallow any liquid through the cavities they have left.

Dec. 21st.

R. Hydr. Submur. gr. iv.

Pulv. Jalapæ. ʒss. Ft. pulv. st. sumend.

R. Liq. Ant Tart . . . ʒij.

Liq. Ammon. Acet. ʒiij.

Mist. Camph. . . . ʒv. Et

mist et cap. coch. iij. 4tis horis. V. S. ad ʒxij. and fomentation to the cheeks.

22d. There is less fever, and also some slight abatement of pain in the head and face. Continue fomentation to the face and medicine.

23d. Much the same. Bowels freely opened.

R. Lin. Volatil. c. ʒij. pro fctn. Two eggs per diem.

24th. She was much the same all the morning, but complained of sickness. Towards evening it increased, and a violent fit of vomiting came on; she felt choking, when she felt a "crunching," attended with violent pain, and her mouth opened.

25th. She feels much better—pain in the face less.

28th. The glands on the right side of the neck are rather enlarged, and her face is not quite free from pain. On examining her mouth, the whole of her teeth, with the exception of the three or four front ones, are in a state of decay. Most of those that remain being merely blackened stumps; tongue tolerably clean; bowels confined.

Jan. 3d. Dismissed well. She refused to have any thing done to her teeth.

IX.

BIRMINGHAM EYE INFIRMARY.

MR. MIDDLEMORE, assistant-surgeon to this institution, has published, in the *Midland Reporter*, a quarterly report of the cases treated at the establishment during the last three months.* The great majority have consisted, of course, of the different varieties of ophthalmia, opacities of the cornea, iritis, amaurosis, and tinea. Appended to the numerical report are some observations on iritis and amaurosis, by Mr. Middlemore, which are deserving of attention.

I. IRITIS.

Mr. Middlemore has been experimenting with the *spiritus terbinthinæ* in this disease, and the results appear to be confirmatory of the observations of Mr. Carmichael and Mr. Guthrie. He has given it with great advantage to patients who, from delicacy or peculiarity of constitution, are unable to take mercury to the production of salivation. If, too, the acute symptoms have been relieved by mercury, but a chronic disorganizing in-

flammation remain, Mr. Middlemore would strongly recommend the exhibition of a drachm of turpentine two or three times a day. He would urgently advise the early employment of turpentine in inflammation of the choroid and retina.

"Strumous iritis is a disease somewhat uniform in its appearance and history, obstinate in duration, and very little influenced by the modes of treatment usually recommended for its cure. The individuals most obnoxious to its attacks, are children, between the ages of six and eighteen, of a delicate constitution, fair complexion, light hair, and blue eyes; as soon as the disease has become established, the cornea assumes a misty appearance, patches of red vessels are frequently seen upon its edge, there is a zone of pink vessels around the cornea in various situations; the patient is troubled with profuse lachrymation, and great intolerance of light; the iris is almost inactive, and vision is considerably impaired; the eye-brow appears to project considerably before the eye; the muscles (if one eye only be affected), become thicker and stronger than those of the opposite side, from their powerful contraction to exclude the light, and give to the countenance a distorted appearance; the pulse is generally quick and irritable; the appetite uncertain; the secretions unhealthy; the skin dry and harsh, but variable in temperature, the heat of the scalp being oppressively great, whilst the extremities are often chilled with cold. It would be trifling to enumerate the various plans of treatment recommended for the cure of this troublesome disease; no 'one plan' will succeed; a treatment directed to the circumstances of each particular case, will always be necessary; for a delicate child, I should advise small doses of the *hydrargyrus c. creta* every other morning; a grain of quinine twice a day; every other evening a warm bath, and should the skin be harsh and dry, notwithstanding its employment, friction with the hand, or a soft brush should be used, and on no account should suitable clothing, with a view to maintain perfect warmth of the surface, be neglected; a small issue in the arm; moderate (not fatiguing)

* *Mid. Med. and Surg. Reporter*, No. VIII. May, 1830.

exercise must not be omitted, and perhaps riding on horseback surpasses in excellence all other modes of taking it; without specifying any particular articles of diet, I may say in the general, that it should be of a light and nutritious character, animal food being allowed only every other day."

H. AMAUROSIS.

The following remarks are chiefly on the exhibition of strychnine in that formidable malady amaurosis. It is a remedy which is now in some vogue, not only with oculists but with physicians also, in the palsy-cases of middle and advanced age, whether the affection be of the retina or of one side of the body, of a solitary muscle or a large portion of the material frame. The very nature of these cases, we mean their connexion with advanced life, and their dependence on the wear and tear of the machine, precludes the hope of any remedy or class of remedies proving extensively and permanently useful. Medea's cauldron would suit such cases, but short of the youth-restoring drug of the enchantress, there is nothing, alas! that will again give elasticity to the withered sinew: plumpness and vigour to the wasted muscle; or the finely-tuned sensibilities of adolescence to the palsied nerve. Nevertheless, there are, undoubtedly, some cases of palsy and amaurosis, we fear they are fewer than is imagined, that are benefited by the exhibition of the strychnine or stimulating medicines of that class. The discrimination of these must be a matter of experiment and experience. We will give the results of Mr. Middlemore's.

"If a patient has overworked the eye by long-continued action, confined to the inspection of objects of the same colour and description, an enfeebled condition of retina (just as we produce an exhausted state of muscle by over-exertion) will take place. If a man subject his eye to an unnatural stimulus, by looking for many hours daily at bright substances of the same or nearly the same colour—or to sudden transitions from

an artificial glare to comparative darkness (as miners)—or to a diminished stimulus; as by working in dark rooms, or places imperfectly supplied with light—or to any cause allowing the visual textures of the eye to remain, for a long period, in a state of inactivity, as takes place where large opacities of the cornea, and fully-formed cataract exists; the power of the retina will be partially destroyed—its susceptibility to the stimulus of light diminished; but in none of these cases will there be found any structural change in the retina or the optic nerve, any congestion of vessels, or any discoverable alteration from a healthy and natural condition; nor will the system, in all probability, be found affected; no altered state of health sufficient to account for the dimness of vision, will be found to exist. At some kinds of employment it is necessary for the individual to work with the head bent forwards, declining, or the body so distorted as to favour the too liberal flow to the eye, and retard its return; inducing what is termed congestion; a distended state of vessels, unfavourable to free and active circulation; a condition of eye which is also frequently induced by the investigation of minute objects by the aid of powerful glasses. Loss or diminution of the power of vision sometimes comes on from certain causes which diminish the vigour of the system generally—as for instance: after profuse salivation, long continued suckling, menorrhagia, &c. In all these cases, I believe, the strychnine is calculated to produce great and permanent advantage, in combination, of course, with other remedies suited to the particular exigencies of the case—for example: if the retina be weakened in consequence of diminished vigour of the system, remedies adapted to strengthen the system, and a removal of the cause enfeebling it, might be joined to the local application of the remedy in question. But the power of the retina will not always return with the returning strength of the system; in such cases the strychnine is singularly valuable, producing, with wonderful rapidity, the restoration of the organ of vision. Strychnine given internally does not pro-

duce the same beneficial effect upon the retina, as when applied externally. The mode of using it is already before the profession. After having tried it in a variety of ways, and in different situations, I have not been able to discover a better method than that of blistering the skin above the eye-brow, and, after having carefully removed the cuticle, I sprinkle the powder upon the raw surface, taking care to pass a spatula upon the part so sprinkled, to secure it against removal and insure its absorption; a piece of linen (not greased) should afterwards be bound upon the part. The quantity with which I generally commence is the twelfth of a grain upon each side, daily augmenting the quantity, as the patient is enabled to bear it, until it amounts to the $\frac{3}{4}$ of a grain upon each blistered surface. Its first effects are—slight pain in the head, increased power of vision, and severe smarting pain of the part upon which it is applied. Some patients cannot bear its application; others require great care, and a very gradual augmentation of the quantity to enable them to bear it; whilst others will admit of its application without experiencing any other uneasiness than what arises from its action upon the sore. It is not necessary, I presume, to detail cases in support of my views; such a plan would greatly extend my observations, which I have been studiously anxious to limit.—I will now, for a short time, draw the attention of your readers to those cases in which the employment of this remedy would be useless or injurious. If the amaurosis be dependent on any morbid condition of the brain: any alteration of the bony structure; any tumour or other substance pressing upon the optic nerve, the effects of former inflammation, such as opaque deposition or partial disorganization; the effusion of blood; or morbid growths, the enlargement of the vitreous, or displacement of the crystalline humour, producing pressure upon the retina; a varicose state of vessels, as a consequence of distention so continued as to impair their tonic and elastic properties; inflammation of, or disease of, those parts incased by, or anterior to, the retina,—no benefit could be expected to result from the use of strychnine;

but, on the contrary, in many of the cases, material injury might succeed its employment.

We certainly have not seen that benefit from strychnine in general palsy, which some authors would lead us to believe was frequently obtained by it. Mr. Guthrie has been testing its powers in amaurosis, but without any great success. Mr. G. has laid the results before the profession.

X.

HOTEL DIEU.

CASE OF ACUTE NEURALGIA RHEUMATICA OF THE DIAPHRAGM. By Dr. COUDRET, interne à L'Hôtel Dieu.

This case is related by the patient himself, who, as a medical man, may well be considered as capable of appreciating the nature and seat of his own malady.

Aged about 29 years, of nervous temperament, but enjoying good health, he had been subject, for some time, after exposure to cold in the amphitheatre, to slight, intercostal pain in the left side, occasionally exchanged for pains of a colicky nature in the bowels—for coryza—and for cynanche tonsillaris. On the 28th January, 1830, when the temperature was 12° of Reaumur below zero, he was imprudent enough to have his hair cut close, immediately after which he became affected with slight bronchitis and some inflammation of the tunica conjunctiva. On the 9th of February, these affections being still in existence, he was exposed, while warm, to a current of cold air, and thence repaired to the Hôtel Dieu, where he did not, at first, experience any particular inconvenience. At 5 o'clock in the afternoon, he dined, though not with appetite. At 8 o'clock, he experienced a febrile horripilation, general malaise, heaviness of head, pain in his joints, disinclination to motion.

Soon after this a shiver was felt, the coldness being succeeded by febrile re-action, violent pain in the limbs, the loins, and head, &c. The night was very restless, the pains, though general at first, being concentrated ultimately in the left lumbar region, and at the lower part of the chest on the same side. Next day, 9th February, the skin was still dry and burning—the restlessness incessant—headache intense—feeling of great sanguineous congestion about the face—tongue pasty, but not red—thirst considerable—some nausea—urine pale—bowels costive—cough, with catarrhal expectoration—the pain in the loins and side increased by the act of coughing. On percussion, the chest was every where sonorous. At each effort to inspire, the patient found himself checked by a sudden and violent pain, apparently in the situation where the diaphragm is attached to the false ribs of the left side, and also to the spine. He conceived that he felt this same pain in the tendinous centre of the diaphragm, whence it appeared to radiate along the course of the left diaphragmatic nerve to the neighbourhood of the clavicle of that side. The act of turning, the least effort to breathe, to expel the urine, to eructate, or blow his nose, increased this pain to exquisite torture. His common respiration was also short and embarrassed. Lastly, he felt a sensation in his left arm similar to what is described by those who labour under angina pectoris. Nothing was felt about the right side of the chest. Careful pressure was made on all parts of the abdomen, but no uneasiness was thereby produced. These phenomena convinced the patient that the disease was not pleuritis; but that the seat of the malady was the diaphragm. The fever was now very acute, the pulse full, hard, and quick—in short, every thing indicated the necessity of venesection. His friend, who was with him in the Hotel Dieu, immediately bled him to a large amount, without producing faintness. The blood was rich, but very little inflamed. Feeling some nausea, he took several glasses of warm water, and cleared his stomach, but without bringing up any remains of food, or any bile. He now felt better, and had a

mild perspiration. But the pain above-described continued, and the pyrexial symptoms were soon renewed, with discontinuance of the perspiration. Thirty-five leeches were now applied to the anus, followed by a hot poultice to the same, and also to the feet. These means completely removed the headache, and much of the general malaise—the perspiration was reproduced—and he would have experienced some repose, had not the pains in the region of the diaphragm continued to harass him incessantly. He now balanced between the application of 40 or 50 leeches to the chest, or sinapisms to the same part. He determined in favour of the latter—and managed them with great dexterity, contriving to keep up a constant counter-irritation over the left side and back of the thorax, without inducing vesication. Two days of this discipline gave complete relief to his sufferings. On the 12th of February, he was free from complaint excepting debility.

The author thinks, and we are inclined to agree with him, that the phenomena which he has described, and severely felt, indicate a rheumatic affection of the diaphragm—a disease rarely delineated by medical writers, probably on account of the inability of non medical patients to accurately ascertain the seat or kind of their own dolorous sensations.—JOURNAL COMPLEMENTAIRE.

II. CASES ILLUSTRATIVE OF THE EFFECTS OF COLD AFFUSIONS ; WITH REMARKS BY M. RECAMIER.*

A man about 35 years of age, of strong habit of body, and apparently sanguineous temperament, was brought into the Hôtel Dieu in a state of insensibility in the early part of last March. He was a juggler, and was found in the condition above-mentioned in his own apartment. At the morning's visit of M. Recamier he was delirious, but not violently so, knew when he was ad-

* Journ. Hebdom. No. 79.

dressed by name, but was not able to answer questions. His face was injected, his hair on end, his eyes wild and haggard, his discourse incoherent. He had no stertor nor paralysis, and when his hand was raised was able to maintain it so. The abdomen free from tenderness, the pulse 75, regular but small, the skin moderately warm and dry. M. Recamier considered the affection as purely nervous, styled it nervous stupor, and prescribed affusions from head to foot of water at the temperature of 18° Reaumur. The delirium immediately ceased, and on the next day the patient was walking about the ward.

M. Recamier, at least the reporter for him, enters into a subtle and lengthy disquisition on the *modus operandi* of the cold affusion in this and other cases. The pith of a page or two of verbiage is merely this, that the remedy acts on the nervous system, through the medium of the shock to the surface of the body. There is no great discovery in this. The best mode of making the affusion is to procure a vessel with a large mouth, from which the water, at the temperature of 19° Reaumur, is to be poured for the space of six minutes on the head of the patient standing in the bath. The mouth and nostrils should be protected, and it might be useful to place a large wet sponge on the head, by which means the water would run down over the body and produce much the same effect as the affusion.

The reporter concludes the subject with a case of those anomalous hysterical symptoms which a bad practitioner will almost always mistake, a good one as generally recognize. Cough, slight hæmoptysis, palpitations, obstinate rejection of food, &c. were the symptoms that followed in succession or appeared in combination with each other, and obstinately resisted the antispasmodics and sedatives. The reporter, M. Dupré, then had recourse to the bath, the body being immersed in water of the temperature of 26° Reaumur, whilst affusions at 19° were directed on the head. This proceeding was adopted for 15 minutes at a time with very good effect. All well-informed practitioners in this country are in the habit of using

measures similar to the above, in nervous and hysterical disorders. The shower-bath is a less clumsy method of effecting cold affusion than the sponge or the pitcher, but under certain circumstances the latter may be more readily obtained. It is always a good precaution in commencing the use of the shower-bath, to let the patient stand with the feet in warm water, especially if she be a delicate and nervous girl. The benefit derived from this plan in chorea, and the nervous pains in the chest and abdomen of young women, is frequently considerable.

III. SYNCOPE FROM HÆMORRHAGE.*

A woman, æt. 37, affected with organic disease of the uterus was about to have the organ extirpated by M. Recamier, when on the 7th April, she was suddenly seized with profuse uterine hæmorrhage, in consequence of which she fainted and remained for a long time insensible. She was placed on a bed, cold water dashed in her face, wetted towels laid on the abdomen, and an ether draught administered, by which means she was recovered from her dangerous syncope.

The case is detailed for the purpose of mentioning M. Recamier's practice, and relating his clinique on the occasion. The patient should be immediately placed in the recumbent posture, and cold water dashed, not *pleno rivo* but in drops, upon her face, whilst frictions may be made in the region of the heart. If the syncope depend on uterine hæmorrhage, cloths wetted with cold water should be applied to the abdomen, and bladders filled with pounded ice to the vulva and hypogastrium. M. Recamier does not approve of plugging the vagina, as it only prevents the blood escaping, nor of injections as they tend to detach the coagula and renew the hæmorrhage if it is already ceasing. M. Recamier prefers acting on the capillaries of the bleeding organ by applying refrigerants to those parts or organs with which it is sympathetically connected.

* Journ. Hebdom. No. 83.

Thus cold drinks are useful, the nitric and sulphuric acids with æther are also extremely serviceable, and so are other draughts. M. Recamier approves of employing moral agents on the nervous system, because as they often give rise to hæmorrhages in the nervous ladies of the present day, they also conspire to arrest them. So much for M. Recamier's lecture on the treatment of syncope.

IV. DISSECTION OF A RECENT DISLOCATION OF THE HEAD OF THE HUMERUS.*

A man was seized with apoplexy, and in falling to the ground dislocated the upper extremity of the humerus. He was brought into the Hôtel Dieu and died shortly afterwards, when the extremity was carefully dissected, and exhibited to the pupils by M. Dupuytren at his Clinique, on the 12th of February last. The capsule was torn at its inferior part very near its insertion into the neck of the humerus. The head passed freely out, and could be readily returned within it; the greater tuberosity was fractured and detached from the rest of the bone. In lecturing on this piece of surgical anatomy, M. Dupuytren particularly alluded to the facility with which the head of the bone could be made to pass and repass the rent in the capsule. Dessault and many surgeons of the present day have entertained the opinion, that the small size of the laceration in the capsule presents the greatest obstacle to the reduction of the dislocation; and Dessault carried this notion so far, that he insisted on and practised extended motions of the extremity to enlarge the aperture. This idea appears to M. Dupuytren to be much less generally correct than its advocates suppose; but he does not deny the occasional occurrence of difficulties from this cause. We are not informed whether M. Dupuytren's opinion is grounded on this, or more extensive observations; if the former, we need scarcely observe that a solita-

ry fact proves little, though probably this able surgeon is correct.

V. CONGENITAL DISLOCATION OF THE HEAD OF EACH RADIUS.

In February, 1830, a curious piece of pathology was shewn in the amphitheatre of the Hôtel Dieu. The dissection was made by M. Loir, interne of the hospital and professor to M. Dupuytren. The upper extremity of either radius was displaced from its natural situation, and was situated behind the inferior extremity of the humerus, above which it mounted an inch at the least. M. Dupuytren met with a similar dislocation of the radius twenty or twenty-five years ago, but he cannot distinctly remember whether it was congenital or existed on both sides. In the present instance, it would be difficult to determine precisely whether the dislocation of each radius was congenital, or produced by some violent twisting inwards of both fore-arms, or was "the result of a white swelling."

VI. FOREIGN BODY IN THE TRACHEA—TRACHEOTOMY.

A little girl, eight years of age, accidentally swallowed a bean, which passed into the trachea and there remained. A violent suffocative cough ensued, and some medical men who were summoned in haste exhibited an emetic without avail. The remainder of the day was passed in alternations of quiet and paroxysms of suffocation, and on the following evening, Feb. 12th, she was admitted into the Hôtel Dieu. She suffered during the night from violent attacks of and dyspnoea, had several alarming fits of syncope. In the morning of the 13th the cough was still most distressing, and on applying the ear to the trachea the foreign body could be heard agitated within it. M. Dupuytren determined on tracheotomy, which he performed in the following manner. The child being placed on a bed and held by assistants, with the head thrown backwards, an incision nearly an inch and a quarter in length was made along the median line, a little above the superior border of the sternum. The skin and subjacent

* This and the following articles from the Journ. Hebdomadaire, No. 80.

cellular tissue were divided, and the muscles separated from each other, when the trachea was exposed to view. M. Dupuytren, in the next place, with a straight-pointed bistoury guided on the nail of the left fore-finger, divided from above downwards several of the cartilaginous rings of the trachea, with the ligamentous structure uniting them. No air escaped at first, but the edges of the wound being held apart, and the head slightly bent, it issued with much force, and after some violent efforts at inspiration, the bean was driven out from the wound, and fell on the breast of the little patient. The respiration then became natural, the cough ceased, and the child appeared to be well. The edges of the wound were carefully cleansed from the blood, some simple dressing placed in front of the neck, with one or two gentle compresses, and a moderately tight bandage over all. The bean was five lines in length, three in breadth, and as many in thickness.

In the evening there was much fever, and venesection was required. Next day the respiration was entirely carried on by the tracheal opening, and some pain was experienced in the larynx. Leeches and diluents were employed with great advantage, and on the 15th the breathing was free and unembarrassed, and only a little whistling through the wound was heard. On the 20th, the edges of the wound were brought together, and some days afterwards, its extent being reduced to one-third its former size, the child was taken home by her parents. In a month after the operation they brought her back, and there still remained a minute aperture through which issued a stream of air.

A clinical lecture on the above case was delivered by M. Dupuytren. In order to make the first incision through the skin and subcutaneous cellular tissue, the head should be directed backwards, but when the incisions are completed, this position of the head is very unfavourable for the free escape of air or of the foreign body. In the foregoing case the air was prevented from escaping so long as the head was kept backwards, and the bean was expelled from the larynx when the neck was bent forwards. One caution

is requisite in the performance of the operation; between the muscles in front of the trachea is a cellular interspace, which, when divided, forms a kind of cavity, and in this the operator may get perplexed, if not aware of its exact nature. M. Dupuytren particularly directed the attention of his hearers to the shock communicated by the foreign body to the parietes of the trachea, and distinguished by the ear or even by the hand. It was present in this instance, but is not perceived in all cases, nor even at all periods of the same case. If adherent, of course the foreign body cannot be moved, and if not moveable, it obviously is incapable of communicating an impulse to the parietes of the trachea. In dressing the patient after the operation, M. Dupuytren is careful at first not to bring the edges of the wound together, in order to prevent any hazard of emphysema. At the end of some days, however, when the cellular tissue is in some degree condensed by inflammation, and no danger of emphysema exists, there can be no objection to approximating the sides of the opening. No lint should be placed over the wound, as it has occasionally penetrated into the trachea, and induced dangerous consequences.

VI. FOREIGN BODY IN THE LARYNX— EXTRACTION.

A female between 45 and 50 years of age, presented herself at the Hôtel Dieu on the 20th of March, 1830, with violent pain at the top of the larynx on swallowing, or even in the act of respiration. She stated that six or seven days previously she had swallowed a fish bone, since which she had experienced the distressing sensation in question, and that latterly it had been more severe than at first. The mouth being widely opened, M. Dupuytren introduced his finger as far as the epiglottis, which he thus examined; near its base and posteriorly he could feel a substance projecting like a pin's head, but the rest of it was concealed beneath the epiglottis and could not be examined. M. Dupuytren, maintaining his fore-finger on the foreign body, introduced by its guidance a pair of ring-forceps, seized the fish-bone,

for such it proved to be, and gently extracted it; it was about an inch and a quarter in length. The operation was attended with little pain and no hæmorrhage, and the woman probably required no further assistance, for she never returned to the hospital.

XI.

LOWESTOFT INFIRMARY.

CASE OF IMPERFORATE VAGINA—OPERATION—DEATH, WITH THE DISSECTION.

[Reported by Mr. W. C. WORTHINGTON.]

FRANCES BAKER, æt. 14, of a precocious appearance, was admitted a patient of the Lowestoft Dispensary on the 7th July, complaining of violent paroxysms of pain in the abdomen and loins, shooting down the thighs, and with occasional difficulty in passing her urine. In the hypogastric region was discovered a circumscribed elastic swelling, rising above the brim of the pelvis, which she described as having progressively increased for the last three months. From the situation and feel of the tumour Mr. W. was led to suspect some uterine disease existed, and upon endeavouring to make an examination *per vaginam*, to satisfy himself upon that point, he was surprised at an irresistible impediment to the introduction of the finger. On a more accurate investigation, the orifice of the vagina was found to be preternaturally and effectually closed by a firm adhesion of the parts.

Medical treatment having failed to afford her any relief, it became apparent that the swelling and pain were owing to the uterus being distended by the retained menstrual fluid. This opinion was further confirmed by an examination *per rectum*, through which a tumour was perceptible, possessing a distinct fluctuation, and descending towards the perinæum.

The operation consisted in carefully dividing with a scalpel a dense cellular structure, of about half an inch in thickness, situated

at the orifice of the vagina. A thin membranous expansion being left was then punctured with a lancet, which gave exit to about a pound of dark-coloured fluid. The swelling immediately disappeared and the girl expressed herself relieved. A spongetent, well oiled, was inserted, and retained between the divided parts.

The third day after the operation, severe pain in the abdomen, with exquisite tenderness supervened, together with excessive gastric irritation. Notwithstanding a strict antiphlogistic plan of treatment was adopted, the patient died the following morning.

On examination after death, the peritoneum was found to have been generally affected with inflammation; various gangrenous spots were presented to view, also a considerable quantity of lymph was effused, causing adhesion of the convolutions of the bowels. The uterus was nearly of its ordinary size, but the vagina was dilated into a pouch, contracted towards its orifice, capable of holding a pint and a half of fluid. Its parietes were much thickened, and of a semi-cartilaginous structure.

Professor Langenbec* relates a similar case, in which death took place the fifth day after the operation, and attributes the tendency to inflammation to the long retention of the menses. He, therefore, very judiciously advises the operation never to be delayed when the true nature of the complaint is discovered; an opinion worthy of attention, inasmuch as some surgeons have considered all interference as improper, until such time as the tumour shall have attained a large size, grounding their opinions upon the principle, that it may then be punctured with more facility.

If the professor's views on the subject be correct, the practice of an early operation in cases of imperforate vagina cannot be too strongly enforced, and the reporter cannot but be inclined to believe that the unfortunate issue of this case has contributed to, verify the truth of them.

* Langenbec's Bibliothek, Vol. IV. pt. 3.

XII.

LA PITIE.

SOME CASES SHEWING THE EFFECTS OF THE
SUPPRESSION OF HABITUAL EVACUATIONS.

Three or four cases are reported from the practice of M. Louis, in La Pitié, illustrative of the subject under consideration, which is by no means an uninteresting one.

Case 1. A Voiturier, aged 25 years, had had an ulcer of long standing on each of his legs, of which he was cured in La Pitié in the space of six weeks, and was discharged. In about three weeks afterwards, he returned to the same hospital, complaining that, in two days after his discharge, without any ostensible cause, he became affected with acute pain in the left flank, and also in the left side of the chest, attended with some fever, loss of appetite, and diarrhœa, but without cough or expectoration. Venesection did not relieve these symptoms, and when examined at the hospital, on the 28th of April, the following were the symptoms: the heat of surface was increased—pulse rather accelerated—thirst—white tongue—ten motions in the 24 hours—acute pain in the left flank, increased on pressure, and extending to the groin of that side—a tumour developed in the left hypogastric region, protruding several inches beyond the level of the false ribs. The inferior part of the left side of the chest sounded dull, and no respiration was there heard—but was clear in every other direction. The tumour appeared to M. Louis to be an enlarged spleen; and he thought this enlargement, as well as the diarrhœa, was owing to the suppression of the long-established drain from the ulcers on the legs. With this impression, M. Louis endeavoured to re-establish the said discharge by means of a large blister to the leg—and twenty leeches to the left flank and left side of the chest. In two days the pains had nearly ceased, and the diarrhœa was much diminished. The size of the spleen also decreased rapidly, and, by the 19th of May, there was no vestige of tumour in the left side, and the chest on that side was sonorous throughout. He was

discharged cured. We forgot to mention that an issue had been established in the flank.

Case 2. This was a deaf person, but very intelligent, aged about 55 years, who came to the Hospital La Pitié in the beginning of last Winter, with a large ulcer, of several years' standing, on the malleolus internus. It was dressed regularly every day, and soon healed. In two or three days after the complete cicatrization, the patient, who had previously been in good health, lost his appetite, had nausea, malaise, lassitude, without any other symptom that could indicate any particular disease. The above continued to increase for eight days, when M. Recamier applied a large blister to the site of the healed ulcer. As soon as a suppurative discharge was established, the foregoing phenomena diminished, and in the course of a week, they entirely disappeared. The patient remained three months in hospital, and had no return of complaint. The blister was then allowed to heal, and health continued.

Case 3. A female, aged 40 years, had a vaginal discharge for several years, which was suddenly and totally suppressed by a severe moral affliction. From that time the appetite and strength diminished—the patient complained of pains in the epigastrium—wasted in flesh—and, after three months, was obliged to enter the hospital. M. Louis endeavoured to re-establish the vaginal discharge by means of the vapour-bath—sinapisms, &c. In about eight days these remedies reproduced the vaginal discharge, from which period all the symptoms above mentioned gradually diminished, and at length disappeared.

Case 4. A female, aged 62 years, was received into hospital on the 23d of May of this year. The catamenia had ceased about 12 years previously, since which she was subject to palpitations of the heart and pains in her head. For these she had been bled eight times. Her legs swelled occasionally in the evenings. During the last six months she had leucorrhœa of inodorous character. Having been severely frightened by some ruffians one evening, and beaten by them, the discharge suddenly stopped, and soon

after this she felt depressed, with head-ache, giddiness, some obscurity of vision, constant drowsiness, cramps in the limbs, with some dyspnœa and œdema of the feet. Nevertheless she was free from the palpitation; but her appetite disappeared. These symptoms continued unabated for eight days, and were in the same state when she entered the hospital on the 23d of May. She appeared to have a good constitution—pulse 84, regular, as were the motions of the heart, which did not appear enlarged—lungs sound. A large blister was applied to the inside of the right leg—vapour-bath to the lower half

of the body—sinapisms to the feet. 24th. Pulse 96—the other symptoms the same. 20 leeches were applied to the lower extremities. 25th. During the bleeding of the leeches, some of the leucorrhœal discharge returned, but did not continue. The symptoms however, were all mitigated, and when the blister came to discharge freely, they disappeared, with the exception of considerable debility, which required tonics and nourishing diet. Some threatenings of her former symptoms, however, required the formation of an issue in the thigh, which entirely removed them.

MISCELLANIES.

XIII.

THE LATE KING.

Now that the marble tomb has closed over the cold remains of His late Majesty, and the columns of our contemporaries, medical and popular, have ceased to pour forth their daily and hebdominal lucubrations on the nature, cause, treatment, and probable event of a disease, the subject of which they had not seen, and the symptoms of which they were not permitted to know, we may be pardoned for making a few observations on this tragical scene of suffering and death.

The life of irregularity—*medically speaking*, we might, perhaps, call it *INTemperance*—which the vigorous *PRINCE* and indulgent *MONARCH* is well known to have led, could scarcely fail to impair the functions, and, ultimately, derange the structure, of some of the vital organs. Gout was the first manifestation of this constitutional disturbance, and doubtless warded off, for a long time, more dangerous consequences—partly by the reduction of an overloaded system, through the medium of pain, depletion, and abstinence—partly by determining plethora and irritation to structures not essential to the existence of life. Pain is seldom borne with patience, even by philosophers—and still less by princes. That his late Majesty had, for some years, been in the habit of allaying the sufferings and cur-

tailing the paroxysms of gout by full doses of Wilson's *TINCTURE*, we have some reason to believe; and we need scarcely say that such bye-ways, or, as we might here call them, royal roads to temporary health, seldom fail to entail on the experimenters a train of disorders more dangerous, if not more dolorous, than those which were set up by the wise hand of Nature, but interrupted in their course by the interferences of art. Three powerful classes of causes contributed to augment and exasperate the effects of this reiterated, but perhaps unavoidable application to colchicum, for the abbreviation of the arthritic attack:—full and stimulating regimen—inactivity—and a humid, or rather malarious atmosphere. The existence of the first two classes of morbid agencies in His Majesty's case, is too well known to require proof in this place. Those who have examined the medical topography of the cottage, Virginia Water, and all those routes where the king spent so much of his time in inactive repose, or at the most, in *passive* exercise, can only wonder that His Majesty's constitution so long resisted the usual and almost inevitable effects of an atmosphere for ever loaded with moisture, or impregnated with vegeto-animal exhalations.

We have no means of judging of the actual phenomena which the King's ordinary health may have presented, previously to the issue of the first and celebrated bulletin,

respecting the "bilious attack," and "embarrassment in breathing," on the 15th of April last. It was not likely that the somewhat-vague phraseology made use of, on this occasion, should escape the censure of those who, having neither responsibility nor practical knowledge themselves, delight in affixing the stigma of ignorance on others. Thus a great outcry has been raised against the King's physicians, because they did not state, in the public bulletin's, the precise NAME and NATURE of a disease, which, perhaps, not one physician in Europe would have been able to have stated, with any thing like certainty—no, not even Lænnec, had he been alive, and admitted to examination of the royal chest: And by whom has this weighty accusation against His Majesty's physicians been raised? By men so ignorant of practical medicine—and more especially of auscultation, that they could not tell which end of the stethoscope was proper to be applied to the ear or the body—men so ignorant of morbid anatomy, that they did not know either the name or the nature of the disease, when the minutes of the dissection were lying on the critical table before them!! This will scarcely be believed; but we pledge ourselves to prove it.

Before proceeding to this task, however, we shall make a remark or two on the moral or ethical part of the question. It is the bounden duty of the medical attendant, when he cannot arrest the progress of a mortal malady, *not to accelerate the fatal event*. No political interest—no state policy can or should bend this maxim from the direct and inflexible line of uncompromising punctuality. The prince and the peasant are on terms of rigid equality in this respect. What practical physician, then, we would ask, could be so cruel, so unfeeling—so unprofessional, as to allow a patient, labouring under organic disease of the heart, to be made acquainted with the astounding fact and fiat, that for him *more no longer existed!* The genius of a NERO, a CALIGULA, a HELIOGABALUS, never invented a torture so truly diabolical as this announcement, so advocated and lauded by the self-elected hero of HUMANITY, and a narrowing JENTO of disappointed democrats! Every medical

man, excepting those who know nothing of diseases of the heart, and those who have no hearts in their own bosoms, are well aware that such an announcement as is above alluded to would, in all probability, be attended with most imminent danger—perhaps death, to their patient. Such is the cold-blooded policy of scribbling tyrants, who, from a conscious sense of their own ignorance, would shrink from the responsibility of a diagnosis—or hesitate not to assert the most wilful falsehoods in the event of a detection of their blunders!

It is unnecessary to tell the well-informed of the profession, that no extent of experience—no amount of pathological knowledge, can enable a medical practitioner to give any thing like an accurate prognosis as to the *duration* of an organic disease of the heart, even when he is convinced of the existence of that terrible malady and of its final result. Many who labour under the most formidable symptoms linger out for months and years—while others, whose symptoms are by no means alarming, drop off suddenly, when no apprehension of death is entertained by physician, patient, or friends. Who, then, would be so ungenerous or unjust as to blame the physicians of His late Majesty, for not at once proclaiming to the nation that which no human sagacity could tell or foretell—the precise nature, duration, or degree of danger of an organic disease? None, but the ignorant or the *unprincipled!* Sorry are we to say, that the latter class is almost exclusively to be found, in this instance, among the ranks of our own profession!

The medical advisers of His late Majesty were denounced for their ignorance, in not knowing the name of the disease, and only calling it by one of its symptoms—"THE EMBARRASSMENT OF BREATHING." Yet more than half of the long black catalogue of human afflictions, with all their hard and uncouth nomenclature, are only the names of SYMPTOMS—and certain we are that the very best practitioners prescribe, in nine cases out of ten, for *symptoms alone*. When they prescribe for *names* of diseases, they are generally wrong! Then there is no such disease as "embarrassment of breathing," according to these wise-acres. What is

DYSPNŒA—the third genus in Dr. Good's order pneumonia? What is dysphagia, but a symptom? What is Bex, (cough,) the first genus of the order pneumonia? Why a symptom; and yet it is laid down in our best nosologies as a distinct disease. Suppose the physicians had considered (and they would not have been very far wrong) the Royal Patient to be labouring under **ANGINA PECTORIS**. The classical name of this disease is **STERNALGIA**, according to Good. Sternalgia!—"Suffocating breast-pang." What is this but a symptom?—and not a whit more indicative of the nature of the disease which it is designed to represent, than "embarrassment of breathing" was of His Majesty's disorder. But the ignorance and dishonesty of these scurrilous hyper-critics are truly disgusting, as we shall now proceed to demonstrate.

OFFICIAL ACCOUNT OF THE POST-MORTEM EXAMINATION OF HIS LATE MAJESTY.

The body exhibited but little sign of putrefaction; and the anasarca had disappeared, excepting some slight remains of it in the thighs.

Notwithstanding the apparent emaciation of His Majesty's person, a very large quantity of fat was found between the skin and the abdominal muscles.

Abdomen. The omentum, and all those parts in which fat is usually deposited, were excessively loaded with it. The abdomen did not contain more than an ounce of water.

The stomach and intestines were somewhat contracted; they were of a darker colour than natural, in consequence of their containing mucus tinged with blood; and in the stomach was found a clot of pure blood, weighing about six ounces.

The liver was pale, and had an unhealthy granulated appearance.

The spleen, although larger than usual, was not otherwise diseased, and the pancreas was in a sound state.

The sigmoid flexure of the large intestine (the colon) had formed unnatural adhesions to the bladder, accompanied by a solid inflammatory deposit of the size of an orange.

Upon a careful examination of this tumor, a sac or cavity was found in its centre, which

contained an urinary calculus of the size of a filbert, and this cavity communicated by means of a small aperture with the interior of the bladder at its fundus. In other respects the bladder was healthy, and the prostate gland did not appear to be enlarged. The kidneys were also free from disease.

Thorax. Two pints of water were found in the cavity of the right side, and three pints and three quarters in the left side of the chest. The left lung was considerably diminished.

The lower edge of each lobe of the lungs had a remarkable fringe, which, upon examination, was found to be formed by a deposit of fat.

The substance of the lungs had undergone no change of structure, but the mucous membrane lining the air-tubes was of a dark colour, in consequence of its vessels being turgid with blood.

The pericardium (or heart-purse) contained about half an ounce of fluid, but its opposite surfaces in several parts adhered to each other, from inflammation at some remote period.

Upon the surface of the heart and pericardium there was a large quantity of fat, and the muscular substance of the heart was so tender as to be lacerated by the slightest force: it was much larger than natural. Its cavities upon the right side presented no unusual appearance, but those on the left side were much dilated, more especially the auricle.

The three semilunar valves at the beginning of the great artery (the aorta) were ossified throughout their substance, and the inner coat of that blood-vessel presented an irregular surface, and was in many parts ossified.

The original disease of His Majesty consisted in the ossification of the valves of the aorta, which must have existed for many years, and which, by impeding the passage of the current of blood flowing from the heart to the other parts of the body, occasioned effusion of water into the cavities of the chest and in other situations. This mechanical impediment to the circulation of the blood also sufficiently explains those other changes in the condition of the body which were con-

nected with His Majesty's last illness, as well as all the symptoms under which the King had laboured.

The immediate cause of His Majesty's dissolution was the rupture of a blood-vessel in the stomach.

HENRY HALFORD.

MATTHEW JOHN TIERNEY.

ASTLEY PASTON COOPER.

B. C. BRODIE.

Those who are in the habit of attending to the symptoms of diseases during life, and examining their causes or effects after death, need not be told that the ossification of the semilunar valves, in the above case, must have been of old standing—must have been in the very same condition six months ago, when his Majesty was driving about in apparent health, as when, on the 15th April, the embarrassment of breathing was first announced. This ossification of the semilunar valves (even if the origin of the aorta was contracted, which does not appear on the record) could have had nothing to do with the sudden attack of dyspnoea. That phenomenon was clearly the consequence of the serous effusion into one or both sides of the chest. But what was the cause of this effusion? Not, we think, the ossification of the semilunar valves:—*first*, because we frequently find these valves ossified in elderly people, without any effusion of water—and *secondly*, because we still more frequently find hydrothorax without any ossification of the above-mentioned apparatus. But the disease which was clearly at the bottom of all, in this case, was the degeneration of the muscular structure of the heart, the great deposition of fat, and the *passive* dilatation of the left chambers. These diseases (in the King's case) were, no doubt, going on for months or years;—but when they arrive at a certain height, or the organ happens to become embarrassed by the accession of any inflammatory affection of the lungs, then effusion is the usual consequence, and a new train of symptoms is developed, which often obtains a new name, without good cause.

And now let us hear the name which the sticklers for names (Mr. Wakley and his prompters) have given to the complaint of the King.

"In what terms can we speak of the incompetency of the medical attendants? "For, with a stethoscope in his hand, and an ear in his head, a tyro in the profession might have discovered, in May last, the existence of *HYPERTROPHY* of the heart, and "disease of the aortal valves."—*Lancet*.

Thus this censor of the medical press—this censurer, or rather slanderer of all that is respectable in the profession, is so grossly ignorant of pathology, that he calls a heart whose muscular structure was rotten—whose surface was covered with fat—and whose chambers were passively *dilated*, an *hypertrophied* heart! Such is the pseudo-pathologist who does not know ramollissement of the muscular structure and obesity from *HYPERTROPHY*!!!* It is for such a state of heart that the Ex-Warden of St. Giles would have prescribed a "regulated system of depletion." Oh! yes. The *LANCET* is an admirable remedy for "a tender and lacerable heart." The pathologist of St. Giles's tells us that "the embarrassment in the King's breathing arose from a disordered state of the heart's action, the blood not being *propelled* with its natural regularity and velocity through the *lungs*." Indeed! A heart in a state of *hypertrophy* (as he affirms it to be in) or superabundance of muscular structure, not able to drive the blood through the lungs! True it is, that the dissectors inform us that there was *nothing unusual* in the right or pulmonary chambers of the heart—while it was the *left* chambers that were dilated, and consequently incapable of throwing the blood with vigour or velocity through the *aortic system*. But all this is Arabic to Squire Wakley, who appears to know as much about the *propelling* powers of the heart, in the morbid condition above recorded, as he does of the inhabitants of the Moon.

* "Quelques auteurs, et particulièrement M. Laennec, proposent de donner ce nom (hypertrophie) à l'augmentation d'épaisseur, et presque toujours de consistance de la substance musculaire du cœur, sans aggrandissement dans la capacité des ventricules et des oreillettes."—*Dict. de Sciences Med. (Nour.)* Tom. 5, p. 426.

"The inflamed action of the membrane covering as well as lining the heart's cavities (!) continued unabated; hence was laid the foundation for the watery effusion, the deposition of lymph into the pericardium, producing adhesions, the thickened irregular state of the aorta, and ossification of its valves."

What is this membrane which covers the heart's cavities? Where is there any mention of inflammation of the membrane lining those cavities? The membrane covering the heart's *parietes* had been inflamed at some remote period; and as for the "watery effusion into the pericardium," it amounted to half an ounce—an obvious post-mortem effusion. The ossification, too, of the semilunar valves was produced (according to the *Lancet*) by the same inflammation which caused the watery effusion—namely, between March and June of the present year! What a pity that Mr. Wardrop's advice was not taken on the 25th March, as it went to the effectuation of a revulsion of all this pathological condition (then considered gouty) to the lower extremities!

Such is the jumble of political pathology which the *LANCET* has brought forth with the aid of its prompters. A more monstrous mass of ignorance and imbecility never graced the pages of that publication—and that is the strongest term of reprobation which language can convey.

As to the political and personal malignity of this "composition of mud and blood," (an expression applied by the preceptor of *TIBERIUS* to that worthy prototype of the *LANCET*) we shall not sully our pages by any examination of them. They are disgusting and revolting monuments of the depraved appetite for vulgar slander and scurrilous abuse in a liberal and learned profession! We have exposed the astounding ignorance and utter incapacity of the medical writers in the *LANCET*, and this is the only function which we consider ourselves as called upon to perform.*

One reflection may be permitted in conclusion:—Much as His late Majesty suffered, during the last six weeks or two months of his life, he narrowly and fortunately escaped years of torture. Had the calculus not become sacculated, what a series of sufferings would the King have been exposed to—and how formidable would have been the operation of lithotomy in such a subject!

*Excesse vite ærumnis facilisque lubensque,
Ne peiora ipse morte dehinc videam.*

XIV.

SUPPOSED POISONING BY MERCURY.

M. ORFILA has published a long paper on this subject in a recent number of the *Archives*, the proximate cause of which may be first succinctly stated.

On the 3d of July, 1829, a female named VILLOING, residing at St. Brisson, having then been ill for five or six days, was visited by Dr. Carron, at her own request. She complained of great oppression at the epigastrium—frequent inclination to vomit, and occasional discharges of bilious matters—full pulse—flushed face—eyes and countenance yellow. The husband said that the cause of his wife's illness was fatigue. Dr.

jeasty's physicians were well acquainted and convinced of the existence of organic disease of the heart, in his Majesty's case, many years ago. The proof of this will shortly appear. In respect to the infamous and libellous charge made against Sir Matthew Tierney, in the *LANCET*, we pledge ourselves (from the most authentic sources of information) that it is *false as Hell*. There is not one word of truth in the accusation; the whole of which is a fabrication, founded in blighted ambition, and personal spleen. When a villain makes a charge against an honest man, he is called upon to prove it. The *onus probandi* unquestionably falls on the slanderer; and if he can shew no ground for his calumny, he is properly punished. It is not for the honest man to come forward and prove that he is honest—but for the trader to shew some evidence to the contrary.

* We cannot conscientiously close this subject, without stating that we have information the most unequivocal, that His Ma-

G. ordered a grain of tartar-emetic by lavement, and desired the husband to report next day. A report was made that she was rather better, but still harassed with sickness. He prescribed an opiate. Two days afterwards the doctor was summoned in great haste to the patient, but did not find her worse, according to appearances, and still considered the complaint as a bilious affection, reiterating the opiate medicine. He prognosticated a speedy recovery: but on the morning of the 7th July, he was astonished to learn that the patient had died the preceding evening. The vomitings, he was informed, had become extremely frequent for some hours before death. Several poisonous substances, as oxymuriate of mercury, arsenic, &c. were found in the house. The body had been buried, without any suspicion of poisoning; but was disinterred some days afterwards by orders of the *Procureur du Roi*. The examination of the body by Drs. Carron and Ballot, took place on the 22d July, 15 days after interment. Considerable decomposition had taken place, and the most horrible effluvia issued from the body. The thorax, the heart and lungs offered nothing remarkable. The internal membrane of the œsophagus was injected, but neither softened nor ulcerated. On opening the abdomen, the dissectors were astonished to perceive that the abdominal viscera appeared to be those of a corpse recently deprived of life. No effusion, no adhesion. There was a considerable quantity of air in the intestines; but the sides of the stomach were in close contact. On closer examination, two perforations were found in the stomach at its inferior and anterior part, together with several discoloured spots, both on the exterior of the stomach and of the intestines. The liver was greatly enlarged, and its surface emphysematous. The pancreas and spleen, although of a dark color, were not altered in texture by putrefaction. The same with the kidneys. The stomach was very large, and a patch of intense redness, two inches in extent, was visible on the mucous membrane of the smaller curvature, and the two perforations above-mentioned, the external apertures of

which were wider than the internal. The mucous membrane of the organ was intensely red about the cardiac orifice, and this redness spread along the lesser curvature. The great cul de sac was also the seat of red arborization, in which were erosions. The internal orifices of the perforations were clean cuts, as if made by a circular chissel, and without any surrounding redness. There was nothing unusual in the appearance of the pylorus. In the stomach, duodenum,—in short, throughout the whole tube were found numerous globules of mercury, and about two drachms were collected pure. The membranes themselves were covered with a kind of mercurial dew (*rosée mercurielle*) formed by globules infinitely divided. Numerous experiments made on the contents and on the tissues of the stomach, intestines, and other organs of the body, could not detect any trace of poisonous substance, beyond the metallic mercury above-mentioned.

The two physicians made the following remark. As there is no other way of proving the administration of corrosive sublimate, after it has combined with the tissues and formed submuriate of mercury, than by reproducing the metal, and as crude was already found in the stomach and bowels, such revivification of the metal would not afford any proof of poison, since it might be said that the metallic mercury recovered from the tissues, was only the metallic mercury that had penetrated into them previously. Nevertheless they thought such a reproduction would afford suspicions of poison having been taken.

M. Orfila then set about making two series of experiments—the first by exhibiting to dogs the oxymuriate of mercury, with the view of obtaining the crude metal from the tissues with which it had combined—the second, by exhibiting the same oxymuriate, along with substances that are known to be capable of decomposing it in our laboratories. In respect to the first series:—If thirty or forty grains of sublimate are given to a dog, he is destroyed in a few hours—from four to ten or twelve. If the body be buried for three or four months, then disin-

ferred, and examined, no crude mercury can be discovered. But if the tissues are exposed to the action of potassa at a white heat, crude mercury will be volatilized from the state of calomel in which it had been transformed by the combination with animal matters. This proves, therefore, that the decomposition of sublimate in the body does not present globules of mercury but submuriate of quicksilver.

Second series. Corrosive sublimate, dissolved in water, is decomposed, so as to furnish metallic mercury, by iron, copper, zinc, arsenic, and phosphorus. Albumen, gelatine, alcohol, or oil have not this effect.

By numerous experiments and reasonings, however, which we have not room for here, M. Orfila comes to the conclusion that there was no proof whatever afforded that any of the salts of mercury had been swallowed by the deceased VILLOING. He stated that the probability was that the post-mortem appearances were the result of disease, (inflammation,) and that crude mercury had probably been administered under the popular notion that obstructions are cleared away, and pains alleviated by that metal.

XV.

METROPOLITAN SOCIETY OF GENERAL PRACTITIONERS.

OUR readers have seen in our last number that the nucleus of an association has been formed, among a large and very influential class of medical society—the GENERAL PRACTITIONERS, for their mutual and individual interests—for the increase of their own respectability—for the attainment of beneficial laws—for the periodical assemblage of the members—for the cultivation of social intercourse—and for the establishment of a benevolent fund applicable to charitable purposes.

It would be difficult to imagine what possible objection could be started against the formation of a society, having such laudable purposes in view. Yet not only have objections been started, but the self-elected patron of the general practitioners, is using the in-

fluence of a partial and unprincipled press, to quash the association altogether! And for what reason? For the *avowed* reason that the title of "GENERAL PRACTITIONER" is a degrading title—and consequently that the society is a degrading society! Such is the *ostensible* objection—the *real* one being mortification at not being admitted a member, and not being able to convert the association into a political engine of discord in the profession. How Mr. Wakley, who was a general practitioner himself, and, whose only elevation since that time, has been into that of general libeller, can make it out that the term is degrading, we know not. HIPPOCRATES and CELSUS, among the ancients, were "GENERAL PRACTITIONERS"—and Morgagni, among a host of eminent moderns, was the same. It is absolutely preposterous to attempt to gull the medical public by such a ridiculous charge against a society, when it is well known that Mister Wakley tried all in his power to wriggle himself and his hopeful partner, Mr. Lambert, into the said society, but without success—hinc illæ lacrymæ!

But the name of a society, like the title of a book, will never damn it if it be good, nor save it from dissolution, if bad. If the objects which the Society has held forth be *bonâ fide* objects, they need not fear success—and indeed we are confident that they are sincere in their professions as well as honorable in their intentions. There is one object not stated in the prospectus, but which we have reason to think is contemplated by the Society—the possession of a house, or chambers, where a library and reading room may be established—and where, as in a club, the members may meet and have refreshments or dinners at a very moderate rate. This would be a great benefit and accommodation. Indeed, we are astonished that such an extensive profession, as the medical, has not yet established a club—an establishment which is so easily formed, and so certain of success. The clubs, in fact, are the most flourishing and productive speculations that have been projected in modern times. There is not the smallest doubt but that they will multiply annually. Now the

GENERAL PRACTITIONERS have it easily in their power to effect the formation of a club, where they can meet to transact business, as well as to associate around the festive board—and that at very economical expense. We wish them every success, and they may rest assured that the scurrilous or rather JUDAS-LIKE salutations of the reptile press will do them no injury.

XVI.

ON THE FORMATION OF CLOUDS. By DR. THOMSON.

IN a very able volume on Heat and Electricity, lately published by Prof. Thomson of Glasgow, we have some ingenious observations on the formation of clouds, vapour, fogs, &c. He observes that though the presence of vapours cannot be detected in the atmosphere by their colour, yet we can easily judge when the air is loaded with them, because we can see to a much greater distance, and the outline of the distant mountains is much more distinct than when the air is dry.

"In this country it is a comparatively rare thing to see the sky perfectly transparent. Much more frequently the vapour assumes a visible form, or becomes that opaque fleecy looking matter which we denominate a *cloud*. Sometimes these clouds are very high, very thin, and very small in size. At other times they sink lower down and envelope the whole face of the sky. Sometimes two or even three layers of clouds can be seen at different heights above each other. Whenever this happens, one of the layers is moving with more velocity than the others, or we observe one layer moving in one direction, and another in a different one. Sometimes these clouds sink down to the very surface of the earth and envelope it, in which case they are known by the name of *mists* or *fogs*.

There seems little reason to doubt that the cause to which Dr. Hutton ascribed the formation of rain, is in reality the cause of the formation of clouds. Dr. Hutton showed, by experiment, that when air of different temperatures, each containing as much va-

pour as is compatible with the temperature, are mixed together, a precipitation of moisture always takes place."

Now whenever moisture is precipitated from air, in consequence of the mixture of air of different temperatures, this precipitated moisture always assumes the appearance of a *cloud* or *mist*. We have a good example in the cloud formed when steam issues from the spout of a boiling tea-kettle. The steam has the temperature of 212° , and—we shall suppose the air at 60° , and saturated with moisture.

Force of vapour at 60° is 0.52 inch

Do. do. 212° is 30

The mean of which is 15.26

But the force of vapour at 136° the intermediate temperature, is only 5.14 inches. Hence a great proportion of the vapour, must be precipitated. But this precipitated vapour, instead of assuming the form of drops of water, which one would have expected, is converted into a *cloud* or *mist*.

Now *mist* or a *cloud* consists not of solid drops; but of a multitude of very thin vesicles of water, enclosing some aerial substance within them, similar to the vesicles usually blown from soap-buds. That this is the structure of clouds and mists was affirmed by Derham and others, his contemporaries. Derham informs us, that he examined them by means of a microscope, and found them to be vesicles. Indeed the vesicular structure is obvious from the circumstance of clouds continuing elevated at a considerable height in the atmosphere, and that fogs may be often seen elevating themselves up the sides of mountains. If clouds or fogs consisted of round *drops*, their precipitation would be rapid. For a drop whose diameter amounted to $\frac{1}{100000}$ th of an inch would acquire a velocity of nine or ten feet per second. Whereas we see clouds hover at a small elevation for hours, and they can in consequence be transported from the sea, lake, river, or marsh, from which they are raised, far into the country or to the tops of mountains, where the requisite supply of moisture cannot be had any other way.

M. de Saussure, senior, while travelling in the Alps happened to be enveloped in a

mist which was almost stagnant. He was astonished at the size of the drops, as he thought them, and at seeing them floating slowly past him without falling to the ground. Some of them were larger than the largest peas. Catching them in his hand he found them to be bladders, inconceivably thin, and he found upon examination that they all had this structure. Indeed the optical phenomena exhibited by clouds and mists, show clearly that they are of a vesicular structure. If clouds were composed of drops they would exhibit a rainbow every time the sun shone upon them, supposing the spectator placed between the sun and the cloud. No such appearance, however, ever takes place. But every person must have observed the *halos* which are formed when a portion of fog is interposed between our eye and the sun or moon. The same halo may be perceived when the cloud formed by the mixture of steam and air is interposed between our eye and a candle or the sun. According to the measurements of De Saussure, the diameter of the smallest of the vesicles, of which clouds are usually composed, is about $\frac{1}{320}$, and of the greatest about $\frac{1}{2620}$ of an English inch."

We have no conception, however, in what way these vesicles are formed—nor is it easy to conceive why these vesicles are sometimes lighter, sometimes heavier than air—sometimes exactly of the same gravity.

"Clouds then are formed whenever two strata of air of different temperatures, and each saturated with moisture, are mixed together. The sky in this country is usually much freer from clouds when the wind blows from the east than when it blows from the west. Because the temperature of the east wind being low, there is less chance during its continuance of strata of different temperatures mixing together. The comparatively high temperature of the west wind renders the chance of an intermixture of air of different temperatures during its continuance much greater. Should a west wind blow in the upper regions of the atmosphere, while an east wind blows near the earth, the whole sky would become clouded, because the contiguous portions of the two strata mixing

together would occasion a deposition of moisture."

We recommend this highly interesting volume to our readers.

XVII.

DR. ADAMS ON TETANUS.

IN the Glasgow Medical Journal of last quarter, No. X. Dr. Adams, of Barrhead, has published a short, but sensible paper on tetanus, in which he has given tolerable specimens of the discrepant opinions and practices of medical men in this formidable disease. Without adducing any facts, or indeed opinions of his own, Dr. Adams has translated and condensed from a German author, (Dr. Michael Funk,) a few cases, with the reports of their dissections, leaving to the profession the option or task of drawing their own conclusions. The following are the abstracts of the cases.

"Case 1st. Francis Leuxner, 18 years of age, and of a vigorous constitution, was employed at a sheep-washing, 26th May, 1819. During the time he was employed, he felt the heat of the sun very strong upon his back. To save a lamb from drowning, he jumped into the water up to the neck. A few days afterwards, after a rigor and hot fit, pains were felt in his neck, and throughout the whole course of his back, and shortly after, the symptoms of trismus made their appearance. Opisthotonos appeared about the 7th or 8th day. He was bled to 30 ozs. had a purgative, and then some opium. The disease proceeded rapidly, without the smallest mitigation from the treatment, and on the morning of the 5th June, death took place amidst convulsions.

On the 6th, the body was opened. The arches of the vertebræ were removed from the first cervical to the last lumbar. In the cervical region, the dura mater was much reddened;—about the first dorsal vertebræ, and under, the canal was filled with extravasated blood, which had also extended some way along the nerves;—the dura mater very red. In the lumbar region this effusion was

greatest, and here the dura mater was considerably thickened. When the dura mater was slit open, there flowed out about 3iss. of dark bloody coloured serum. The spinal cord was now taken out with its coverings, and the dura mater slit up throughout its whole extent. The surface of the cord was rose red—the origins of the nerves swelled—and the cauda equina much reddened. The cord was harder than natural, and when cut into, was found much reddened. The substance of the sciatic nerve was much reddened, and exhibited a fine net-work of vessels.

Case 2d. Anna Ament, 19 years of age, of a strong constitution, received a wound in one of her fingers, from a splinter of wood. The wound inflamed severely, and an abscess formed, which was opened. A few days afterwards, she exposed herself while warm, to a current of cold air, at an open window. She had rigors, succeeded by a hot stage, pain in the neck, and spasms of the face: opium and carbonate of potash were administered. Next day the spasms and pains were increased, the mouth more closed, with one of its corners distorted, and the pain extended down the back. After a warm bath, the spasms and pain abated and she could swallow better, but this relaxation was only of short duration. V. S. to 3xxx. produced no change—the blood was very firm and buffy. In the evening she was again bled to 3xx. and the finger was amputated. All the symptoms, however, became more severe, the patient expired on the 3d day.

‘The distinguished Dr. Hesselbach inspected the body.’ In some places, the nerve of the arm was remarkably inflamed. The whole vertebral canal was laid open;—between the dura mater and arachnoid, was contained a pretty large quantity of bloody serum, the vessels were very much injected, and some extravasation throughout the whole course of the spine. The spinal cord had a more than natural firmness, and was, throughout, from medulla oblongata to cauda equina, dyed red.

Case 3d. John Schäfer, aged 59, entered the hospital of Bamberg with typhus fe-

ver. Soon after his admission, he was seized with tetanus—severe pains in small of back—and paralysis of both upper and lower extremities: and he died in a state of opisthotonos on the 9th day after his admission. The fever had been very severe.

The dura mater of the spinal cord was much reddened—when slit up, 4 ozs. of bloody serum flowed out—a luxuriant network of injected vessels was seen upon the cord—the cauda equina highly reddened—and all the nerves of a pale red colour. The cord, when slit up, was reddish, and a good many bloody points appeared upon the cut surface—it was rather firmer than natural; but in all other respects, perfectly normal.

Case 4th. Eva Wolf, aged 36 years, was admitted into the hospital with typhus. The fever was severe, and with petechiæ. Tetanus seized her, which ended in paralysis, and the patient died on the 22d day, retaining complete consciousness.

The thoracic and abdominal viscera were found in a normal condition:—the dura mater of the cord tightly stretched, and its cavity filled with a great quantity of reddish serum, which flowed when slit up;—the pia mater was much reddened; the cauda equina was pale red;—and the substance of the cord rather firm, and upon being cut it was found reddish.

Case 5th. John Seidlein, aged 36 years, received a wound from a horse's foot upon the left temple. Three days after, he had slight symptoms of trismus, and fever, with constipation, which were shortly followed by complete opisthotonos, and 7 days after receiving the wound he died.

He had been bled to 2lbs, and the blood had the buffy coat.

The thoracic and abdominal viscera were healthy. The dura mater of the cord appeared upon the stretch, and when divided, a small quantity of serum made its escape. Upon the cord, the vessels were observed very much injected, and even a little light-coloured extravasation upon it;—this inflammation extended to the medulla oblongata:—it was most considerable in the region of the neck, and less so in the cauda

equina, although it was pretty much reddened. When cut through the cord showed considerable redness, and a good many bloody points upon the cut surface. In the brain, the vessels were observed considerably enlarged, though not to such a degree as one could pronounce it inflammation.

Case 6th. Sebastian Reh, aged 20 years, of a strong constitution, after having been heated with labour, exposed himself to cold. The following day he had rigors and pains in the neck,—on the 3d day, trismus. In a few days, the pain extended along the whole course of the spine, and he was seized with opisthotonos. He was treated antiphlogistically, and died 7 days after the attack of opisthotonos.

After death, an eruption was observed over the whole of the spine, resembling small blisters and phlyctenæ, but filled with fetid air. The flesh was flabby, and had a peculiar smell, like that of a bird of prey—a smell which Dr. F. says he has remarked in his dissections of all similar cases. A considerable quantity of serum was found in the vertebral canal externally to the dura mater: in this situation was also found some bloody effusion, (coagulable lymph,) having the consistence of false membrane. Upon slitting open the dura mater, which was reddened, some serum was also found, and upon the cauda equina, some bloody effusion. Upon the cord was a fine net-work of vessels much injected. The cord was harder than natural. No morbid appearances were observed in the brain, or in the thoracic and abdominal viscera."

We agree with Dr. Adams that, if ever we are to know what is the disease with which we have to deal, it is by accumulation of cases and dissections, from which we are to draw cautious, just, and logical deductions.

XVIII.

LIVES OF BRITISH PHYSICIANS.*

The lives of British physicians must form

a very amusing topic for the youth of these isles. No more will they dream of the gun and the halbert; no more will they think of the valor of Nelson, nor boast of the wooden walls of old England! Napoleon, the invincible, will be forgotten; the star of his destiny, that gleamed so bright and yet so sadly on the Champs de Mars, is a second time set in the shades of the West. Where is Waterloo? Near Brussels. It is pictured no longer in the minds of our nation, and the Duke of Wellington will only be remembered as having been acquainted with Sir Gilbert Blanc. Farewell, with Othello, to the pomp and the circumstance of war; farewell to the steed and the clarion; a long farewell to—

The mustering squadron and the clattering ear!

The pestle and mortar are in the ascendant; we are henceforth to become a parliament of M. D.'s, and a nation of physicians. Gold headed canes will precede the Chancellor's mace, and the virtues of rhubarb will form the theme of the council-board. Happy, happy, happy doctors, to live in the nineteenth century!

Such were our pleasing reveries on perusing the volume before us, and contemplating the harmless lucubrations of hebdomadal contemporaries. We wish not to disturb their Paradise; we know that where ignorance is bliss 'twere folly to be wise. It is not to be supposed that we intend to give a formal review of the Lives of British Physicians, but an extract or two may prove agreeable to the readers of severer matters. One of the best written lives is that of Dr. Gooch, and the following fragment, which was found amongst some of his loose papers, will furnish an excellent idea of the man.

"From the age of fifteen to twenty-one I was an apprentice to a country surgeon, and when I had nothing else to do, no pills to roll, nor mixtures to compose, I used, by the advice of my master, to go up into my bedroom, and there, with Cheselden before me, learn the anatomy of the bones by the aid of some loose ones, together with a whole articulated skeleton, which hung up in a box at the foot of my bed. It was some time before I overcame the awe with which I used

* The Family Library, No. XIV.

to approach this formidable personage. At first, even by daylight, I liked to have some one in the room during my interviews with him; and at night, when I laid down in my bed and beheld the painted door which inclosed him, I was often obliged to make an effort to think of something else. One summer night, at my usual hour of retiring to rest, I went up to my bed-room, it was in the attic story, and overlooked the sea, not a quarter of a mile off. It was a bright moonlight night, the air was sultry; and after undressing I stood for some time at my window, looking out on the moonlight sea, and watching a white sail which now and then passed. I shall never have such another bed-room so high up, so airy, and commanding such a prospect; or, probably, even if I had, it would never again look so beautiful; for then was the spring-time of my life, when the gloss of novelty was fresh on all the objects which surrounded me, and I looked with unmingled hope upon the distant world. Now—but I am rambling from my story. I went to bed, the moonlight which fell bright into my room showed me distinctly the panelled door behind which hung my silent acquaintance; I could not help thinking of him—I tried to think of something else, but in vain. I shut my eyes, and began to forget myself, when, whether I was awake or asleep, or between both, I cannot tell—but suddenly I felt two bony hands grasp my ankles, and pull me down the bed; if it had been real it could not have been more distinct. For some time, how long I cannot tell, I almost fainted with terror, but when I came to myself, I began to observe how I was placed: if what I had felt had been a reality, I must have been pulled halfway out of the bed, but I found myself lying with my head on my pillow, and my body in the same place and attitude as when I shut my eyes to go to sleep. At this moment, this is the only proof which I have that it was not a reality, but a dream."

In the mode of relating this youthful fright, we see the same pensive poetical turn, which threw a charm on the sober writings of the grave physician. We also trace that feeling of disappointment in the

midst of success, which formed so prominent a trait in the enthusiastic character of Dr. Gooch, embittering his latter days, and occasioning a *posthumous* effusion of ill-nature, which has thrown almost the only dark shadow on his portrait. To pass to another theme, we recommend the following advice from Dr. Denman to Dr. Parry, to the careful consideration of those who are anxious to get into practice, that is, of every man in the kingdom. Depend upon it, that the only way we may succeed in our profession, is really to deserve success. Men may lie, and cringe and flatter themselves into the receipt of gold, but for them the evil day of neglect, and scorn, and the lash of the biographer, is certain to arrive at last. Art and intrigue gain a temporary reputation, perhaps a permanent fortune. But the march of the intriguer is on a bridge as narrow as that of Al Sirat; a single false step may precipitate him into the tortures of ignominy; and even if he prospers in all worldly matters, he carries within him, like Domitian, the terrors of conscious fraud and the presence of an avenging God. *Dolum secum, et insidias, et ultorem Deum includit.*

"Since the time of your first settling in Bath," writes Dr. Denman to Dr. Parry, "I have ever borne in mind the wish to serve you, if an opportunity offered. There have been very few. But I have mentioned you to several who have come down. I am not surprised that you find your receipts come in slowly at present, but all young practitioners think, when they set up their standard, that the world should immediately flock to it, and they are generally disturbed when they find the contrary. But all business is progressive, and the steps now taken may be so calculated as to produce their effect ten years hence. There must be a vacancy before we can get into business, and when there is, the competition must be equal in many points, as age or standing, character for knowledge, industry or readiness to exert our knowledge for the good of our patients, moral qualities, and the like. On the whole, I do not know what any man can do to get patients, but to qualify himself for

business, and then to introduce himself to the notice of those who are likely to employ him. But it is hard to say, on what hinge this matter may turn, as I see men, in great business, of every disposition, or turn of conduct, and with very different degrees of knowledge, and some, I think, with very little, but with great appearance of it. What is very hard, and yet I know two or three instances of it, is, that a man shall be esteemed as a friend, acknowledged to be a man of parts, but none of his friends think of employing him in his profession. This I can hardly explain, unless by the old observation, 'he is too good a poet to be a good physician.' You have judged very wisely in getting appointed to the Charity. It must do some good, though hardly ever so much as is expected from it. I know not why the late Dr. Fothergill said it was a bad thing. With all that can be done, the progress of business must be slow, and may depend upon circumstances which no man can command; but whatever happens it is a point both of wisdom to the world, and justice to one's self, not to be put out of humour.

XIX

NATIONAL CEMETERY.

At the present time, when all London is agog to be buried in the prettiest possible way, and the periodical prints seem likely to become little else than the epitaphs of their editors, the opinions of the learned Sir Thomas Browne are not mal-à-propos. He observes that in olden times, "when the funeral pyre was out, and the last valediction over, men took a lasting adieu of their interred friends, little expecting the curiosity of future ages should comment upon their ashes; and having no old experience of the duration of their reliques, held no opinion of such after consideration. But who knows the fate of his bones, or how often he is to be buried?"

He thinks that the practice of burning and burying the body were equally ancient. According to some tradition, Adam was buried near Damascus, or Mount Calvary;

and Abraham and the patriarchs were also buried. Hector was burned before the gates of Troy. Among the Romans, Manlius, the consul, burnt the body of his son; but Numa, by a special clause in his will, was not burnt, but buried; and Remus was also solemnly buried. The two ceremonies seem, therefore, to have been coeval and indifferent. The origin of *cremation*, or burning, he thinks, may be attributed to the opinions of those ancient philosophers who conceived that fire was the master principle in the composition of our bodies; and, therefore, funeral piles were heaped up, in order to waft them more speedily to their native element. But the Indian Brahmins, he is rather disposed to think, "are too great friends unto fire, for they imagine it the noblest way to end their days in fire, and therefore burn themselves alive." He mentions the different modes of burying as practised by various nations, and remarks that the rites of sepulture do not seem to be confined to man, for there would appear to be some approach to this practice among elephants, cranes, ants, and bees; "the latter civil society," says Browne, "at least carry out their dead, and hath exequies, if not interments."

Sir Thomas, on the whole, concludes in favour of *cremation*, or burning; for says he, "to be knaved out of our graves, to have our skulls made drinking bowls, and our bones turned into pipes, to delight and sport our enemies, are tragical abominations, escaped in burning burials." We know not what our contemporary, the Gazette, will say to this, when it sadly complains of the present effluvia from the city church-yards being quite insupportable to its olfactories. The sulphuretted hydrogen disengaged from a London *cremation*, as Sir Thomas has it, would induce lypothymia, or even turn the green of its cover black. We would strongly recommend the directors of the London Père-la-Chaise, to keep a pyre in some part of their grounds for those who have a yearning after the customs of antiquity. Librarians, school-masters, and those sunk deep in the dead languages, might still be incured, and like Martin Scriblius imagine themselves the veritable classical Amphitryon.

XX.

MAN-MIDWIFERY.

1. AN IMPORTANT ADDRESS TO WIVES AND MOTHERS ON THE DANGERS AND IMMORALITY OF MAN-MIDWIFERY. By a MEDICAL PRACTITIONER. Octavo, 1830.

2. EYES FOR THE BLIND—MAN-MIDWIFERY EXPOSED, &c. &c. Octavo, 1830. By M. ADAMS.

We attach very little importance to the names, or the want of names, in these pamphlets. The harangues of a late President of the College of Surgeons (Sir A. Carlisle) form a sufficient clue to the source whence these detestable and dishonourable pamphlets emanate. The first on the list, from its style, is evidently the production of the collegiate president himself—and as the second (EYES FOR THE BLIND) is addressed to SIR A. CARLISLE, Surgeon to the King and Westminster Hospital, there can be little question that it is either the product of the Knight's brains—or that it has been concocted under his immediate auspices.

When a medical man appeals to the public, through the medium of a daily newspaper, on an important medical question, there can be no doubt that his cause is weak—if not bad; but when he descends to the mean quackery, of employing a man to trudge the streets of this metropolis, with a large label on his back, entitled "EYES FOR THE BLIND"—or an "IMPORTANT ADDRESS," &c. we can estimate the state of his intellects, the honesty of his intentions, and the force of his arguments, with a tolerable degree of certainty. We cannot, of course, assert that these pamphlets were written by Sir Anthony Carlisle; but this we can assert, that if the second on the list, dedicated to the EX-PRESIDENT, be not disowned and repudiated, the DEDICATEE shares, in no small degree, the disgrace of its "beastly and indelicate" tendency. We shall not occupy our pages, or the time of our readers, with any analysis of these detestable productions, dishonourable alike to the heads and hearts of their authors.

Of all the addresses to the worst feelings and prejudices of the ignorant which we have ever read, these pamphlets bear off the palm. The first, for example, commences with "some parts of the evidence given, during an inquest held upon the body of a woman who was represented to have died in consequence of improper treatment by a MAN-MIDWIFE." No reference is given as to the where and when of this coroner's inquest; but because a raw apprentice, in the absence of his master, is accused of unnecessary interference, in dilating the os uteri with his finger—and because the woman died six days after delivery, the inference is charitably drawn, that all mechanical assistance is unnecessary or pernicious—and, consequently, that MAN-MIDWIFERY is a "disgrace to morality and feminine dignity." The above is a specimen of the honesty of the arguments throughout these two productions. We shall record one or two instances in the words of the amiable authors themselves.

"I am acquainted with ladies who have had several children, and who, in some instances, were delivered by females, in others by surgeons of 'considerable eminence.' Now I can easily distinguish those which Messrs A. and B. brought into the world from those Mrs. — received. The former smaller and weakly, displaying distinguishing proofs of the "*men-midwives*" anxiety to welcome the young visitors, while the latter had evidently met with a more tender and friendly, though perhaps less *feeling* reception.

'What is this delicate young gentleman's name?' said a noted Surgeon and Phrenologist to a lady of my acquaintance, 'he has the most beautiful craniological head I ever met with—such conscientiousness, such combativeness, but governed by conscientiousness!—and such talent for inquiry,—his organs of causality, locality, and acquisitiveness, are positively the most prominent I ever saw.' 'Why, Mr. —, have you forgotten Thomas, whom you delivered me of the night you afterwards attended Lady —, shortly before you went to Path? You surely don't forget how anxious you were, and

what pain I suffered, though he is smaller than any of the rest of which Mrs. — has attended me.’

“How much Gall and Spurzheim owe to those—I am at a loss what to term them, ‘man-midwives.’ They are, in truth, most clever Phrenological bump makers, and if the Cranioscopic system be correct, expecting parents can procure dispositions and characters in variety, by merely informing their *Gentlemen* attendants what temper they wish their offspring to possess; and he will dexterously mould and form the pliant yielding skull to the requisite shape. ‘Nurse,’ said Mr. Obstetric, ‘that child’s head is a strange shape, it squints abominably, and seems convulsed.’ ‘Yes, Sir, and Mistress thinks you hurt it last night, you were so persevering.’ ‘Oh no, my good woman, I shall tell her it is a natural bad formation, and you may wash it often with a little vinegar and warm water, until that *redness* goes off; then you may *press the head gently* into a better form.’ This is not an uncommon case, and I have seen instances of obliquity of vision, convulsions, &c. caused most evidently by imprudent fingering. In some of them, the defect and dangers have been removed or moderated by judiciously applying pressure in such a way as to raise the cause of irritation, the depressed cranium: but this does not always succeed, and unless the naturally good constitution of the child, with careful nursing, overcome the baneful tendency incurred by the attendant’s ill-judged method, it either meets a miserable death, or betrays distressing symptoms of bodily deformity or mental weakness.”—*Address.*

The foregoing extract from the more moderate of the two pamphlets, and which is generally attributed to the pen of the ex-president himself, will suffice. In the other pamphlet, (*EYES FOR THE BLIND*), the most palpable falsehoods, the most gross and villainous insinuations, the most detestable and obscene misrepresentations, are scattered in every page. Yet this pamphlet is “*allowed*” to be dedicated to Sir A. Carlisle by the nominal author!! We shall not pollute our

pages by more than one short extract from this infamous publication—but “*ex uno disce omnes.*”

“Dr. Power recommends friction upon the parts where the pain is most severe. The doctor is to rub a woman’s belly and her back, or forsooth the inside of her thighs, till his arms ache! Nice employment this for a young man full of energy, with lust at his elbow, and a beautiful young woman for his tickling-post!!! Men are but mortal, whether doctors or divines, and such familiarities must require more than human forbearance to exclude criminality.”

Such is the bestiality of a pamphlet which Sir A. Carlisle has politely and graciously permitted the author (or pretended author) to dedicate to his knightship! That the sentiments contained in this worthy production are in harmony with those of the EX-PRESIDENT of the College of Surgeons will be rendered more than probable by certain extracts which we shall take the liberty of making from one of Sir Anthony’s own manifestos, as published in the *TIMES* Newspaper, some time ago.

“My Lords and Gentlemen!

“Some months since I addressed a letter, through the medium of this paper, to the King’s Secretary for the Home Department, to caution him against the *worldly designs and the injurious practices of men-midwives*, and, if I am rightly informed, those statements have been well received by all the *disinterested and respectable members of the medical profession (!!)* It was to be expected that teachers of man-midwifery, and their adherents, *who regard the healing art chiefly for its profits*, would become outrageous against the persons who expose their *dishonourable vocation*, and accordingly they have been liberal in abuse of them, and loud in the praise of their ‘*Diana of the Ephesians*!’ but few sensible men calculated upon a by-intrigue to persuade the public that the birth of mankind ought to be considered a surgical operation; yet, *this absurdity actually disgraces the printed circulars of a College, which possesses the unemployed means for*

taking the highest station in Europe. It is my firm conviction, that the establishment and the further prevalence of man-midwifery, sanctioned as a branch of surgery, would compromise the justice of the country, by exposing the lives of child-bed women and infants to many dangerous and unnecessary secret operations. Under this impression, I should be passively dishonest, if I were to neglect the severe duty of asserting my professional thoughts. Having devoted as much time to the study of the elementary sciences which constitute the only safe foundation for the healing art as any of my contemporaries, and having, from long-continued meditation and from experience, endeavoured to distinguish the means which help, and those which are hurtful in the perilous business of surgery, I am free to confess that I view the operations of men-midwives as the most uncertain and the most violent of surgical enterprises." "That educated men should submit to be associated with nurses and gossips, for whole days and nights, merely to wait the humiliating events of parturition, is contrary to decency and common sense; men-midwives, therefore, teach their disciples to assume directorial offices, and to be curiously or officiously meddling, under various pretences, by which the terrified and shocked distressed object is rendered obedient; and when the operator's patience begins to fail, or his predictions are at fault, he rushes into the perilous adventure of using his conjectural desperate art; and I confidently believe that the increasing number of deaths to mothers and infants, as well as the pretended difficulties in midwifery, are mainly, if not altogether, imputable to such undue or improper interference. Whenever a degree of violence dangerous to the life of a parent or child is meditated, the moral propriety of it should be confided to physicians or hospital surgeons of enlarged intellect. My present purpose is, therefore, to awaken the attention of the legal authorities of this kingdom, and to prepare them for deeds which must arouse the indignation of parties who may suffer from the audacity of young adventurers in surgical midwifery. Even before this innovation, it cannot be denied that many rash surgeons

have been hurried by vanity, or from pecuniary necessity, urged to seek premature vulgar fame, by attempting unjustifiable operations, trusting that fatal results would be hushed for the sake of the character of the profession, and my own experience in a metropolitan general hospital, where every medical officer is kept in check by rivals, has induced me to hold public consultations in the presence of all the students, in order to prevent questionable enterprises. If such precaution is needful in public practice, what security can we find in the privacy of a lying-in-room, where often none but ignorant women are present, and where surgical acts of violence may be passed over without inquiry? The public are not aware that the self-constituted teachers of what is now termed 'The Obstetric Art and Science,' are not any of them general hospital surgeons, or hospital physicians, and their assumed authority to dictate to surgeon's pupils the terms on which they may commit irremediable injuries to women, or destruction to infants, are not sanctioned by law. I do not announce these alarming statements unadvisedly, but from serious apprehensions, awakened by the flippancy with which men-midwives write and speak of sacrificing a child, or wounding the vital parts of a mother." "I, therefore, most respectfully submit, that whenever cases of violent death occur to mother or infant, from the use of surgical instruments or surgical hands, a coroner's inquest should be holden, and if sufficient proofs are adduced of hasty violence, or of rashness, the affair should be investigated before a jury, and a chief reliance placed upon the opinions of some grave disinterested physician, or experienced hospital surgeon, they being persons the best qualified to understand the intricate hinges of life or death, and to determine how far it may be ever expedient, under given circumstances, to hazard the life of a mother, or that of her progeny."—A. CARLISLE.

That a medical man, who has held the distinguished and honorable posts of President of the College of Surgeons, and surgeon to a metropolitan hospital, should give utterance to such sentiments as are contained in

the foregoing extracts—and that in a public newspaper, we could not have believed, had we not read them twice over, and found that they were not disavowed as a forgery.

When we contemplate the opprobrious epithets and the criminal accusations which this man lavishes on his brethren, and when we reflect that there is not one atom of fact for their foundation, we are at some loss to account for the motives which could have led him to the publication of such slanderous insinuations. We do not think it would be unfair to attribute such malicious inventions to depraved thoughts passing in his own mind. But we will not be so uncharitable as the writer of the foregoing epistle. We attribute the sentiments therein contained to two sources—an obliquity of intellect—and a temper soured by disappointment. That any man whose senses were not warped, and whose judgment was incapable, on this subject, of drawing rational conclusions from obvious facts, could have indited such an epistle, or dared to insinuate such criminal conduct against three-fourths—nay, nine-tenths of the medical profession, we fearlessly deny:—while the tone in which his animadversions are conveyed, indicate the other part of our proposition, the soured temper. If the author has devoted so much time to “elementary sciences,” to “long-continued meditation,” to “experience,” &c. he has turned his time and talents to little account, when he is led to “view the operations of men-midwives as the most *uncertain* and the most *violent* of surgical enterprizes.” Where did Sir Anthony learn these things? He never practised midwifery himself, and yet he has the presumption to decide on the dangers, the violence, and the injuries occasioned by the obstetric art!! This utter ignorance leads him to pronounce that decency is outraged by the attendance of surgeons on parturient women; whereas, all who know any thing of the matter, are aware that the attendance of females is the source—the fertile source of indecency. Sir Anthony’s insinuation respecting “unnecessary secret operations”—“wounding the *vital parts* of a mother,” &c. are so abominable and diabolical, that we would not be author

of them for all the gems of Golconda’s mines. If the writer of the foregoing letter occupied the highest pinnacle of fame in the medical profession, it would level him in the dust;—as it is, the author has not much to fear from the depth of the fall.

XXI.

ON THE CURE OF TONSILLITIS BY MEANS OF CALOMEL. By Dr. BUET.

[Journ. Complement.]

THE French are beginning to shake off their hydrargyro-phobia, and we should not be much surprised if they give mercury more freely than their English neighbours in the course of a few years.

Dr. Buet has lately drawn the attention of his countrymen to the exhibition of calomel both in acute and chronic amygdalitis, informing them that this plan is by far the most efficacious in the reduction of those chronic enlargements of the tonsils, which embarrass deglutition and alter the voice so much as sometimes to render the excision of the glands necessary. In the *Journal Hebdomad.* for May, 1830, M. Mondezert published some cases treated on the mercurial plan, and the recital of these cases drew M. Buet’s attention to the subject. Six cases are detailed by the latter physician, some of which we shall briefly notice.

The first case was of a chronic nature; and the difficulty of deglutition had been troublesome for four months. The tonsils were enlarged and indurated. Six grains of calomel and thirty grains of powdered savine leaves were divided into six doses, and one of these was ordered night and morning. The pain and sense of difficulty in deglutition were, at first, increased; but soon diminished, and in a week the patient was cured.

In three cases of acute amygdalitis, Dr. Buët observed the most striking advantages to result from the administration of calomel. The first of these was a female who experienced a rigor, and then a most violent inflammation of the tonsils and throat generally. She would not submit either to leeches or venesection. Calomel in the manner above-mentioned, was therefore prescribed; and, on the third day, the patient was able to resume her avocations. The other cases had a similar result.

We do not attach very much importance to this measure; but we think it is worthy of remembrance in chronic cases, where, however, we would recommend the auxiliary assistance of iodine, either in the shape of frictions with the hydriodate of potash, or the tincture of iodine, beginning with doses of four drops thrice a day, and gradually increasing the medicine to 20 drops *ter die*.

XXII.

CASE OF MENTAL DERANGEMENT; OCCURRING IN PERIODICAL ACCESSIONS CORRESPONDING WITH THE PHASES OF THE MOON, AND APPARENTLY CONNECTED WITH HEPATIC DISORDER. Reported by J. FERCUSSON, M. D. Assist. Surgeon, 27th Regt.*

PRIVATE Peter Keinan, 27th Regt. *et. 26*, has been only three years in the West Indies, and remarked by his comrades for being wild and silly in his general behaviour. He was on the hospital guard at Grenada on the 3d of March, 1829, when Major-General Sir J. C. visited the hospital, and was scarcely relieved off sentry, when he presented himself to the General's notice, and behaved in the most extravagant manner, proclaiming himself a deserter from the 58th Regt. He was deprived of his arms, and put in confinement; where he became quite

outrageous, singing and cursing, at intervals, tearing his clothes and breaking every thing he could lay hold of. He slept little and talked much, returning answers to his own questions; he continued in this state till the 16th, when he had a lucid interval, which lasted four days, and then he relapsed into his former state—dancing, singing, and talking to himself. He tore whatever clothes were given him, and lay naked on the floor of his cell, appearing quite insensible to cold. His appetite was so ravenous, that he once caught a fowl, and eat all but the skin and feathers. His stools were black and scanty. The first efforts were therefore directed to restore the healthy state of the *biliary secretion*; but it was necessary to select the lucid periods for this purpose, as he smeared his person with his feces, if medicine was given in this outrageous state. He had *two lucid intervals* every month, and the change from the insane to the sane state corresponded exactly with the *lunar changes*—a circumstance which was only discovered when the case was closed, by comparing the *register* with the *almanack*. His head was kept close shaved, and shower baths given once or twice a day with good effect. He was also bled once, when outrageous, without producing any mitigation of symptoms—his pulse was generally at 50—skin cool, emitting that fetor so peculiar to the insane—tongue clean—made no complaint of his head. He took a five grain calomel pill three times a day, during three lucid periods, each of four or five days duration—having previously used blue pill in the same proportion, without effect—and on the 11th of June his mouth became, for the first time, affected by the mercury. He was quite coherent and melancholy—sobbed bitterly all day—his pulse quickened, and his feces assumed a more natural appearance; from this period was dated his recovery, as he had only two slight accessions afterwards, and is now at his duty in robust health, having had no attack for the last eleven months, and the Adjutant remarks that he is much quicker at his drill than before his illness.

* Regimental Hospital, 27th Regt.

Barbados, June 20th, 1830.

XXIII.

ALLEGED DISCOVERY OF THE USE OF THE
SPLEEN AND OF THE THYROID GLAND.

By Sir A. CARLISLE, F. R. S. President of the Royal College of Surgeons, &c. Octavo, stitched, pp. 23. Price Half-a-Crown. Title page, with red and blue lines alternately.

WHEN we see an individual with an emaciated body, and a pallid face studded with carbuncles, we always conclude that some of the vital organs are in a state of decay, or at all events of *derangement*. The recollection of this observation flashed on our minds, when we contemplated a royal octavo title-page crossed with red and blue stripes on a white ground—like the tricoloured flag waving over the fading lily of the Bourbons!

Sir Anthony dedicates this notable "DISCOVERY" to the Earl of Egremont, as a respectful homage to a nobleman "who generously maintained through life Mr. André, a helpless man of genius of my profession." What Mr. André may have done, or left undone, thus to merit the eleemosynary protection of an English nobleman, we know not;—but we confess that the present dedication, founded on such a basis, looks rather awful, especially when coupled with the following *splenetic* effusion.

"The nobility of England in former times were the munificent protectors of literature and science, and the same patronage is wanted in the passing age; because forward and rapacious writers now address their crude productions to an increasing multitude of superficial readers, leaving the more profound labours of studious men to a market glutted with frivolous books."—*Pref.*

That the literary market has been glutted with frivolous books, in all ages, is a remark as old as Homer, and as often repeated as the succession of the hours and days, since the blind bard's time. But that good books are suffered to fall into oblivion because the nobility of England have ceased to patronize them, we most positively deny. The case indeed is altered. The patronage of a great

man cannot now, as formerly, protect stupidity and imbecility from the keen arrows of criticism, or raise fools and flatterers into butterfly distinction. Patronage, now-a-days, must be sought and gained (if gained at all) from the PUBLIC—and, although GENIUS must often wither in the shade of neglect, we hope its fostering angel will never wing her flight from the republic of letters to the aristocracy of wealth.

We entreat the readers attention to the following passage in the preface of this half-crown harlequin.

"The talent for *scenting* discoveries before they become apparent to the *vulgar*, is not a worldly advantage; it excites the hatred of *ordinary* persons, and occasions the jealous opposition of rivals. I do not look for a favourable reception of my doctrines until they have been submitted to the *more competent* physiologists of the Continent, and on their disinterested judgment I confidently rely, not only for a due estimation of the explanation here given of the uses of the spleen and thyroid gland, but also for a just valuation of all the collateral illustrations which are here adduced."—*Pref.*

The vanity which breathes through the foregoing passage is truly laughable. The "*talent for scenting discoveries* before they become apparent to the *VULGAR!!!*" And then again, the ingratitude of the author's compatriots! He looks for no favourable reception among his own countrymen! No! It is only among foreigners that Sir Anthony expects a favourable reception. And why? We are ready to grant that riches, rank, and reputation, in the medical profession, are followed by envy and detraction, as regularly as the substance is followed by the shadow. Sir Anthony is a knight; and what is more, he has held the presidency of the College of Surgeons. But these dangerous eminences have been attained by men before Sir Anthony's "discovery" saw the light, and that without drawing upon them the jealousy, envy, and hatred of their countrymen. Mr. Abernethy was president of the College, and yet Englishmen respected his writings. Sir Astley Cooper attained

the baronetage as well as the presidency, and still his writings were devoured by the profession, as soon as they issued from the press.* Sir Anthony has not shewn much tact or discrimination in the foregoing passage. He has, at one and the same time, insulted the *justice* of his countrymen, and the *judgment* of foreigners. If Englishmen neglect or repudiate the "alleged discoveries" of Sir Anthony, because he is a knight or a president, they are a despicable set of wretches:—if foreigners embrace them, when the whole body of the British medical profession treat them with contempt, they are fools.

And now let us glance at this wonderful "*alleged discovery*" of the functions of the spleen and thyroid gland. The "*discovery*" was read at the College of Physicians, and escaped our notice last year. It is an old friend, with scarcely a new face! Both Harvey and Stukely imagined that the principal office of the spleen was to furnish a focus of heat. M. Ribes, in an elaborate article on the spleen, in the great *DICT. DES SCIENCES MED.* makes use of the following expressions, which we recommend to Sir Anthony's attention. "We are surprised at the mass of futilities sent forth respecting the use of the spleen. Are we to believe, with some writers, that it serves as counter-balance to the weight of the liver—that it serves, according to Cowper, to attenuate the blood—or, according to Harvey, to *heat* the same?"—Now the great "*discovery*" which the "*talent for scenting*" has enabled Sir Anthony to make is, neither more nor less than this—that the spleen is a kind of oven for heating

the stomach and thereby assisting it in the concoction of our food! The thyroid gland, like the spleen, is a warmer or comforter, in its way. It communicates heat to the cold and bloodless cartilages of the larynx, and thereby improves the voice.

"The extreme supplies of red blood to the spleen, and its necessary high temperature, when compared with the scantiness of red blood allotted to the stomach and to the intestines, has occasioned a generally admitted inference, that the spleen transmits heat to the stomach above the rate of its own capacity to furnish heat, and hence it has been concluded by many persons that the heat derived to the stomach from the spleen is conducive to digestion."

We think it is rather unfavourable to the worthy knight's theory that, when the stomach is empty, the spleen is fullest of blood, and consequently is best calculated for its calorific function. On the other hand, when the stomach is full of food, the spleen is most exsanguinous!

Sir Anthony is not content with giving us his discovery of the splenic and thyroid functions for half a crown—he throws half a dozen of other discoveries into the bargain. The hair, which "has been childishly deemed a mere ornament," is proved by our author to be a preventive of coup de soleil and cold. "Perhaps also the axillary tuft of hair is intended as a defence against cold to that *most exposed plexus of nerves* which supplies the arm." This is excellent! It evinces Sir Anthony's surprising "*talent for scenting discoveries*," even in the arm-pits of his own species!

We perceive that the worthy knight, while extremely liberal of his harsh insinuations against "ordinary persons," "jealous rivals," &c. in his own profession, takes especial care to praise himself to the skies. The opening address to the president of the College of Physicians is admirable.

"As the temporary officer of a kindred institution, I feel much satisfaction in making this early attempt to associate the endeavours of scholars and gentlemen to promote the science of organic physiology. On

* This we know to our cost. The worthy baronet, instead of *buying* any favourable notice from us by a present of his late work, left us to search about and buy it at the expense of two guineas and a half! It is almost the only modern work which we have been obliged to purchase—and yet we shall not abuse the Baronet for the contribution which he has thus levied on our pockets.—*Editor.*

addressing your highly distinguished body upon subjects which have interested medical philosophers during more than 2000 years, some introductory apology may be deemed proper, and I accordingly submit that my pretensions to this honour rest upon zealous studies and practical researches in comparative anatomy during youth, and upon unceasing physiological meditations through a long professional life."

So then this long life of "zealous studies," "practical researches," and "physiological meditations," has brought out the wonderful discovery that the spleen is an oven for heating the stomach!

Parturiunt montes—nascitur ridiculus mus.

XXIV.

LIVES OF BRITISH PHYSICIANS.*

WE intend to extract an anecdote or two occasionally from this amusing little volume. It must always be interesting to the present generation of medical men, to gain something like an insight into the private life and the chimney-corner of those who have long since earned their share of wealth and reputation, and passed away from the busy stage. Surely nothing impresses on the mind, with more solemn force, the futility and vanity of man's fretful and chequered career, than the study of biography! It is the same with all, the PRINCE and the clown—the man of talent, and the blockhead! We read that, on such a day, in such a year, they were born;—that they engaged in certain pursuits, and then—they died. But our mood must not be sad;—we took up the pen for amusement, perchance instruction; and why should we dip it in the ink of despondency!

DR. WILLIAM HUNTER.

The first eminent man to whom we direct our attention, is DR. WILLIAM HUNTER.

How strange and how awful the contrast between his first lecture and his last.

"His first anatomical course was attempted in 1746. He experienced much anxiety and doubt at the outset, but applause gradually inspired him with confidence, and he at length found the principal happiness of life to consist in the delivery of a lecture. Mr. Watson, one of his earliest pupils, accompanied him home after the trying moment of his introductory discourse. Hunter had just received seventy guineas from admission-fees, which he carried in a bag under his cloak, and observed to his friend, that it was a larger sum than he had ever before possessed. The early difficulties of eminent men form perhaps the most instructive and animating portion of their biography. Linnaeus records of himself, *Exivi patria triginti sex nummis aureis dies*. The profits of his first two courses were considerable; but, by contributing to relieve the wants of some of his friends, he found himself, on the approach of the third season, under the necessity of deferring his lectures for a fortnight, merely from the want of money to supply the expense of the usual advertisements. This unpleasant embarrassment operated as a check upon him in the use of money, and probably formed one remote source of the large fortune which he afterwards accumulated."

All here was buoyant; success converted the pale tremors of diffidence and suspense into the full flush and swing of conscious vigour. As happens with professional men, he lived but in the atmosphere of his own creation; he was miserable, save when lecturing. At last, like the old and gallant steed, on whose ears have burst the well-known notes of the trumpet and the bugle, he rushes to the charge, exults, and dies.

"About ten years before his end his health was so much impaired, that, fearing he might soon become unfit for the profession which he loved, he proposed to recruit himself by a residence in Scotland, and was on the eve of purchasing a considerable estate, when

* Family Library.

the project was frustrated by a defect in the title-deeds. This trifle banished his rural plans, and he remained in London, continually declining in health, but pursuing distinction with the same ardour with which he had courted it in his earlier days. He rose from a bed of sickness to deliver an introductory lecture on the operations of surgery, in opposition to the earnest remonstrances of his friends. The lecture was accordingly delivered, but it was his last; towards the conclusion his strength was so much exhausted, that he fainted away, and was finally replaced in the chamber which he had been so eager to quit. In a few days he was no more. Turning to his friend Combe, in his latter moments, he observed, *'If I had strength enough to hold a pen, I would write how easy and pleasant a thing it is to die.'* He expired on the 30th of March, 1783: his brother, John, occasionally introduced the catheter in this last paralytic seizure."

Dr. Hunter, it is well known, confined himself to the practice of midwifery, and the following statement respecting the earlier teachers of this branch of medicine, may probably be gratifying to Sir Anthony Carlisle.

"Mawbray seems to have been the first teacher of obstetrics in London. He was lecturing in 1725, and established a lying-in hospital, to which students were admitted. The Chamberlains followed him—a family which professed to possess a better method of treating difficult labours than was known to others, and maintained a sort of mystery as to their instruments. This pretension was imitated by others. Smellie gave a new dignity to the subject by his talents and his lessons; although he is accused by a rival of advertising to teach the whole science in four lectures, and of hanging out a paper lantern, inscribed with the economical invitation, *'Midwifery is taught here for five shillings!'*"

When Dr. Hunter invited his younger friends to his table, they were seldom regaled with more than two dishes; when alone he rarely sat down to more than one: he would say, *"A man who cannot dine on this*

deserves to have no dinner." After the meal, his servant (who was also the attendant on the anatomical theatre) used to hand round a single glass of wine to each of his guests. How different all this from the modes of the day! Now, if a few pupils dine with their teacher, a dinner in state, with claret and champagne, is scarcely considered good enough for the nice young gentlemen. Our modern instructors have discovered, that, provided they appeal in a touching style to the belly, they need give themselves comparatively little trouble respecting the brains of students.

DR. BAILLIE.

So much has been written on this honoured name, and his memory is yet so green in the memory of all, that we shall only select one short anecdote of his irritability when much pressed by business. We have seen it before, but perhaps it may be new to many of our readers, and it possesses the inestimable advantage of brevity.

"During his latter years, when he had retired from all but consultation practice, and had ample time to attend to each individual case, he was very deliberate, tolerant, and willing to listen to whatever was said to him by the patient; but, at an earlier period, in the hurry of great business, when his day's work, as he was used to say, amounted to sixteen hours, he was sometimes rather irritable, and betrayed a want of temper in hearing the tiresome details of an unimportant story. After listening, with torture, to a prosing account from a lady, who ailed so little that she was going to the Opera that evening, he had happily escaped from the room, when he was urgently requested to step up stairs again; it was to ask him whether, on her return from the Opera, she might eat some oysters: 'Yes, Ma'an,' said Baillie, 'shells and all.'"

DR. JENNER.

Jenner was certainly a fortunate man. He lived to see his doctrines enthusiastically embraced; he was styled the benefactor of mankind, and what was still better, he knew that he was so; he received a handsome

parliamentary grant; and he died before those manifold failures of vaccination had started into any thing like a prominent attitude. It is true that his rewards were far, very far disproportioned to his merits; but still, when we look at the fate that commonly awaits discoveries, we cannot but consider JENNER as pre-eminently fortunate. The biographer of this amiable and great physician takes a less encouraging view of this subject.

"Nevertheless," says he, "a painful reflection is forced upon us, in considering the history of Jenner; he surely did not receive, among his countrymen, the distinction, the fortune, and the fame which he merited. It seems that, among nations called civilized, the persons who contribute to amusement, and to the immediate gratification of the senses, occupy a higher share of attention, than the gifted and generous beings who devote their existence to the discovery of truths of vital importance. The sculptor, the painter, the musician, the actor, shall engross, a thousand times, the thoughts of citizens who, perhaps, only five times in a whole life, consider the merits of a Jenner. The little arts of puffing, the mean machinery of ostentation, never once entered the heads of a Newton, a Watt, or a Jenner; but they protrude into meridian splendour the puny pretensions of countless poetasters, witlings, and amateurs. Real genius and active industry should not be dismayed, however, by this indifference which clouds the dawn of their exertions, and which sometimes nips the bud of noble aspirations; for great truths there will always come a time and a place; the man who works for the benefit of his fellow-beings can afford to await the hour allotted for the full development of his labours, and bequeaths, in tranquil confidence, to posterity the reputation which he may have failed to obtain from a dominant coterie of capricious contemporaries."

Those who can look philosophically through the mist of years, and, like Swift, dedicate their lives to PRINCE POSTERITY, may scorn the little buzz of ephemeral popularity. For those, however, who have no

such noble yearnings after posthumous fame, it is mortifying, no doubt, to see the world more disposed,—

"To worship Catalini's pantaloons,
than pay the eager tribute of admiration to
solid unpretending worth.

We may mention of Jenner, ere we part, that, before he had matured his magnificent discovery, for such it deserves to be called, the Alveston Medical Club were so bored with him and it, that they threatened to expel him. When about to publish his first memoir, he was seriously admonished not to present it to the Royal Society, lest it should injure a character acquired by some observations on the cuckoo! If these examples are not sufficient to shew the blindness of man, and the hair-breadth 'scapes to which the most beneficial improvements are liable, then will we—

"Break our pipe and never whistle mair."

Dr. Gooch.

Alas, poor Gooch! Too frail and too irritable for this world, thou art quietly reposing at last with the wife of thy bosom and the children of thy affections, in the silence of the tomb! Thy faults, and they were few, are wrapped in the shroud;—thy excellencies survive for thy family and thy profession. We recommend the life of Gooch to the perusal of all, who can look, with saddened and subdued gratification, on genius and talent and enterprise, struggling through a feeble corporeal frame, a melancholic temperament and unremitting ill health.

P. S. The Editor, who is not the writer of the foregoing notice of Dr. Gooch's biography, may be permitted to state that he was on terms of intimacy with Dr. Gooch for five or six years before his death. The memoir, though very minute, perhaps prolix, on many points, is not complete. Dr. Gooch consulted the Editor of this Journal more than once respecting a complaint which harassed him greatly, though not at all alluded to in the memoir—viz. a prolapsus ani and a considerable discharge from the rectum. Dr. Gooch was a HYPOCHONDRIAC, in consequence of the state of his stomach—and somewhat of an enthusiast,

at the same time, which accounts for many of the sentiments of despondency and sanguine expectations blended in his correspondence with Mr. Southey. It has been already mentioned in a former number of this Journal, that the amiable and expectant deceased consulted the Editor, when within a few days of his death, respecting a journey to Nice or Pisa, for the prolongation of his life, if not the restoration of his health!! This shewed the predominancy of the pulmonary over the gastric disease, towards the close of life—a predominancy which fortunately strewn the path to the tomb with flowers, and verified the adage that—

“Hope springs eternal in the hectic breast.”

XXV.

HYPERTROPHY OF THE MUSCULAR COAT OF THE STOMACH, &c. By M. REYNAUD.

CASE. A labourer, aged 58 years, of robust constitution, was seized, towards the end of May, 1823, with symptoms of the endemic which then prevailed in Paris. For two or three months this man had complained of loss of appetite, urgent thirst, pains in his limbs and arms, which last had diminished, but never entirely disappeared, and were succeeded by paralysis of the lower extremities. In fact, for three months before his death he was totally incapable of walking. When he came under the reporter's care, the hands and arms were still the seat of darting pains, and they were contracted and distorted. He now also complained of constant pain at the pit of the stomach and under the sternum. His appetite had been quite gone for a month. The epigastrium offered great resistance on pressure—the vomitings were frequent—the tongue was moist and natural—thirst considerable—obstinate constipation—skin dry—pulse slightly accelerated—emaciation advanced. This emaciation and these symptoms continued till the 3d of April, when the patient died.

Dissection. Passing over the minute but useless details of dissection respecting the head and thorax, we find that the stomach was more ample than natural, and had contracted some adhesions with the liver. The organ contained some undigested matters, and about two pints of a dark-coloured fluid. The mucous membrane was rather thinner than natural. The pyloric orifice would scarcely admit the point of the little finger. There was a thickened and *scirrhus* state of the cellular substance interposed between the coats of the stomach around the pylorus for a little way. But the whole parietes of the organ were in a state of great hypertrophy. This hypertrophy was seated in the muscular structure of the stomach, which was as red as the fibres of any of the voluntary muscles.

The lesions which were observed in the cortical substance of the brain, were supposed to account for the loss of sense and motion in the lower extremities; but as they did not appear satisfactory to us, we shall not occupy space with them here. The hypertrophy of the muscular coat of the stomach is curious and interesting. **HEDDOM.**

XXVI.

ON GLAUCOMA. By WILLIAM MACKENZIE, Lecturer on the Eye in the University of Glasgow, &c.

THIS zealous cultivator of ophthalmology has published a paper on the above subject in the eleventh number of our Glasgow contemporary, of which we shall offer an analysis to our readers. We shall begin with the pathological anatomy. Very little on this subject is recorded even by the best ophthalmologists. Mr. M. was anxious for an opportunity of dissecting some glaucomatous eyes, and lately was favoured with several in that state. The following are the particulars which he observed.

“1. The choroid coat, and especially the portion of it in contact with the retina, of a light brown colour, without any appearance of pigmentum nigrum.

2. The vitreous humour in a fluid state; perfectly pellucid; colourless, or slightly yellow. No trace of hyaloid membrane.

3. The lens of a yellow or amber colour, especially towards its centre; its consistence firm, and its transparency perfect, or nearly so.

4. In the retina, no trace of *limbus luteus*, or *foramen centrale*.

To the first of these changes, namely, the deficiency of *pigmentum nigrum*, I am inclined to ascribe, in a great measure, the opaque appearance of the deep-seated parts of the eye in glaucoma. This appearance I regard as a reflection merely of the light from the retina, choroid, and sclerótica; it is probably bluish when it first leaves the reflecting surface formed by these membranes, but immediately assumes a greenish hue from passing through the yellowish fluid which occupies the place of the vitreous humour, and through the lens, which is still more decidedly of a yellow, or even amber colour, at that period of life when glaucoma is most apt to attack the eye.

Scarpa has adopted a similar view of the nature of Glaucoma, namely, that it is a reflection; but he assumes, seemingly without proof, that it is from a thickened retina that the reflection takes place. After mentioning that those cases of amaurosis may be regarded as incurable, in which the bottom of the eye presents an unusual paleness, similar to horn, sometimes inclining to green, and reflected from the retina as it from a mirror, he adds, in a note, the following remarks. 'The retina of a sound eye is transparent; and, therefore, in whatever degree of dilatation the pupil may be, the bottom of the eye is of a deep black. That unusual paleness, then, which accompanies amaurosis, indicates that a remarkable change has happened in the substance of the optic nerve forming the retina, which, according to all appearance, is become thickened, and rendered permanently incapable of transmitting the impressions of light.'

Mr. M. has never detected any other change in the retina than what is above mentioned—namely, a want of the *limbus luteus* and *foramen centrale*.

Symptomatology. Limited and sluggish motion of the pupil, with other amaurotic symptoms, always attend glaucoma. Ultimately the pupil is dilated, and the retina becomes insensible to light. The loss of sight is generally gradual. The want of *pigmentum nigrum* may sufficiently explain the weakness of sight which accompanies glaucoma in the early stages. The pressure of the accumulated fluid within the eye is probably the cause of the total blindness which results at last.

"If the pupil of a glaucomatous eye is small, the appearances are apt to impose on the inexperienced observer for those of cataract. The colour, however, of the glaucomatous eye, is sufficient to prove that the case is at any rate not one of simple lenticular cataract, for opacity of the lens alone is never green. A green cataract is always attended with glaucoma. On dilating the pupil by belladonna, the green appearance presented in simple glaucoma seems to retire to a greater depth behind the iris, and becomes more circumscribed.

Glaucoma is frequently combined with arthritic inflammation. When this is the case the sclerótica and conjunctiva become loaded with varicose vessels of a livid colour, the pupil dilates irregularly, the lens becomes opaque, and is pushed forward so as almost to touch the cornea; the junction of the sclerótica and cornea becomes of a pearly-white colour; racking pain is complained of in the eye and head, and vision becomes totally extinct. After some time, the inflammatory symptoms subside, and the contents of the eye-ball begin to be absorbed, so that it shrinks to less than its natural size, and, instead of the preternatural hardness which it formerly presented, becomes boggy.

The symptoms which we gather from the testimony of the patient, are the following:—viz. sensations of fiery and prismatic spectra, *muscæ volitantes*, misty and indistinct vision, and pain across the forehead, which is, at first slight, but often becomes severe. Not unfrequently those who become affected with glaucoma have long suffered from those pains in the teeth and head, which are gen-

erally accounted rheumatic. In some instances the glaucomatous eye is still sensible to objects placed to one or other side of the patient, while in every other direction it distinguishes nothing."

Proximate cause. Mr. M. thinks that inflammation may be the cause which leads to the destruction of the hyaloid membrane; and that this, in its turn, may produce a series of other changes. It is also probable, he observes, that the superabundance of the aqueous humour, promotes by pressure, the absorption of pigmentum nigrum, rendering the retina insensible in the end. The destruction of the hyaloid membrane and superabundance of fluid afterwards occupying the place of the vitreous humour, are looked upon by our author as the essential changes which take place in glaucoma.

Exciting and Predisposing Causes. The Germans consider glaucoma as almost always connected with arthritis, or rather as the result of chronic arthritic inflammation. It is much more frequently met with in old than in young subjects—rarely occurring before the age of 40—frequently after 60. Mr. M. has been led to suspect that the habitual use of spirits and tobacco operates in the production of this disease.

Prognosis. When glaucoma has commenced in one eye, it generally extends to the other. In its fully formed state, it is absolutely incurable. But it may often be checked in its progress; and, when only one eye is affected, it may sometimes be prevented from extending to the other. We cannot restore the secretion of pigmentum nigrum, but remedies may occasionally arrest the disease, and even improve the impaired vision.

Treatment. This we shall give in the concise language of the talented author.

"1. On the presumption that glaucoma originates in an inflammatory affection of the hyaloid membrane, bleeding and purging have been employed in order to arrest its progress; and occasionally this practice has been attended with benefit. Counter-irritation, also, has been found useful, and especially the tartar emetic eruption between the shoulders.

2. Calomel, with opium, has been given, on the principle that in almost all cases of deep-seated inflammation of the eye, mercury proves salutary. As is the case in arthritic ophthalmia, with which glaucoma is certainly allied, an alterative course will prove more beneficial than if the mercury were pushed so as severely to affect the mouth. Indeed, it is evident that from the age and constitution of those who are in general the subjects of glaucoma, neither depletion nor mercurialization can, with propriety, be employed, without more than ordinary caution.

3. Rest of the eyes, a mild diet, a healthy state of the skin, and abstinence from alcoholic fluids, and tobacco in every form, must be enjoined.

4. Arthritic inflammation of the eye is often greatly benefited by the use of tonics; as precipitated carbonate of iron, sulphate of quina, and the like. After depletion, such remedies may be also tried in glaucoma.

5. Dilatation of the pupil by belladonna greatly improves the vision of most glaucomatous eyes, and may be employed day after day as a palliative. The most convenient mode of applying the belladonna is in aqueous solution, filtered through paper, and dropped upon the conjunctiva morning and evening.

6. As a superabundance of dissolved vitreous humour appears to form an essential part of the morbid changes which take place in the glaucomatous eye, it is not unreasonable to conclude that occasionally puncturing the sclerotica and choroid might prove serviceable, by relieving the pressure of the accumulated fluid on the retina. The puncture should be made with a broad iris-knife, at the usual place of entering the needle in the operation of couching. The instrument should be pushed towards the centre of the vitreous humour, turned a little on its axis, and held for a minute or two in the same position, so that the fluid may be allowed to escape.

7. The removal of the crystalline lens from a glaucomatous eye not only lessens very much the greenish appearance of the humours, but improves the vision of the

patient. At the same time, although I am persuaded that the absence of the lens might be advantageous even in the early stage of this disease, and prevent, in a considerable measure, its further progress, extraction is an operation, which I would by no means venture to recommend for general adoption in such cases. The patient generally sees too much to warrant our exposing him to the danger of arthritic inflammation coming on after the operation. I have known glaucoma operated on for cataract; that is to say, the amber-coloured lens removed by extraction, the operator apprehending that he was removing an opaque or cataractous lens; and I have seen the incision, after such an operation, heal without inflammation, and the patient receive a considerable accession of vision. But I have also known such violent inflammation follow the removal of the lens from a glaucomatous eye, as entirely destroyed the natural structure of the most important parts of the organ."

XXVII.

M. CRUVEILHIER ON FUNGUS TUMOURS OF THE MENINGES OF THE BRAIN.*

THE study of cancerous diseases, though repulsive in itself, and not leading directly to the splendid goal of professional ambition, the cure of human maladies, is productive of many beneficial results. It teaches us that difficult lesson to learn, the when and the where to restrain our hands; it tells us the occasions on which interference would be mischievous, and heroic remedies pernicious; it informs the surgeon, that if there are cases adapted for the knife or the cautery, there are others which to meddle with is murder. We have had but too many opportunities of witnessing the disastrous consequences of operations performed upon malignant tumours, in an improper manner or at an im-

proper time. About two years ago, a woman presented herself to a surgeon with a tumour upon the head. It was soft, had an opening in it formed by ulceration, and had existed for a few weeks only. The gentleman, thinking it a common encysted tumour, introduced a lancet and probe, which appeared to pass deeply, and poked about for some time to his own satisfaction, though not to that of the lookers on. A severe and strange set of symptoms followed, and in two or three days the patient was no more. On dissection, the tumour was found to be fungus hæmatodes, and to be in contact with the dura mater, having extended inwards through a large opening in the cranium. A few days ago, we saw a female with ulcerated scirrhus of the breast, who, according to her own account, had undergone a most improper operation in the country. Part of the breast had been removed, a part of the scirrhus tubercle being left behind, to grow and to ulcerate afresh. We might swell relations of this kind to a fearful magnitude, but enough has been said to establish the position with which we set out.

Malignant tumours on the head are not uncommon. In the paper by Sir Astley Cooper on exostoses, published in his and Mr. Travers' surgical essays, one or two cases of fungus hæmatodes are detailed. We have ourselves seen several, and M. Cruveilhier, in the 8th livraison of his *Plates of Morbid Anatomy*, before us, delineates some well-marked specimens of the disease. We believe that the origin of some of these tumours is incorrectly described by some authors. M. Louis, the celebrated secretary of the still more celebrated French Academy, conceived that these malignant tumours proceeded from the dura mater, and described them under the title of fungus of that membrane. Siebold attempted to overthrow the opinions of M. Louis, and, relying on a case or two, maintained that the fungus originated in the diploë of the cranial bones. From that time to this there have been many and hot controversies on the subject; but, like the men with the camelion, all are right and all are wrong. It will be our object to prove that, occa-

* Anatomie Pathologique. Huitième Livraison.

sionally, the malignant growth takes its rise from the dura mater, and occasionally also from the diploë. If we ventured to place reliance on our own observations, we should say that the latter description of cases was more frequent than the former: but we speak on this point with diffidence. The history of this controversy, is the type and the emblem of almost every dispute in physic. One man saw a case in which the fungus originated in the dura mater: another found an instance of its birth in the diploë. Each maintained that his was the real *Simon Pure*, each concluded that his adversary was mistaken. Like the knights in the fable, they lustily fought on their own sides of the shield, but, unlike those knights, they had not the good hap to be thrown to the opposite, and discover their respective mistakes. So it is with physic and physicians. A man has a case which bears on a mooted point:—through the medium of excusable delusion, and the glass of personal feeling, this solitary fact is erected into a principle—and for that principle he fights with as much pertinacity as if he were contending for the empire of the world. Poor worm! The observer of to-morrow disbelieves his fact and upsets his reasonings, to substitute a tissue as ephemeral in their stead.

M. Cruveilhier takes a sensible and extensive view of these cancerous tumours. He shews that they sometimes arise in the dura mater, sometimes in the diploë. Of the former there are two classes: the one take their growth from the external layer of the membrane, and protrude through the cranial bones; the second proceed from its internal surface, and press inwards on the brain. Other tumours, again, are formed in the cellular texture beneath the arachnoid, and amalgamating that membrane to themselves, it becomes difficult to determine that they have or have not been produced from the internal surface of the dura mater. Lastly, it is not uncommon for tumours of the cranial bones to exist along with tumours springing from the interior of the dura mater. In the present article, M. Cruveilhier confines himself to the consideration of productions of the latter class.

We have already stated, that cancerous tumours attached to the interior of the dura mater are more frequent than those external to it. We meet them on the surface of the brain, at the basis, attached to the falx and the tentorium. When situated on the petrous portion of the temporal bone, they may rather be regarded as belonging to it than to the dura mater; when in the *sella turcica*, they have erroneously been considered as a disease of the pituitary gland or *infundibulum*.

These tumours frequently appear to follow a blow, a fall, or a concussion; the symptoms attending them are mostly equivocal; indeed in the earlier stages there are usually none at all. But, sooner, or later, the pressure, gradually augmented on the brain, becomes a source of irritation to itself or its membranes, and a train of symptoms, sometimes sudden, sometimes slow, are the necessary consequence. Frequently hemiplegia suddenly comes on; we have seen a complete and rapidly fatal apoplexy. A man, says our author, sixty years of age, was returning on foot to his native place, when suddenly he lost his senses, and recovered with hemiplegia of the right side. Nearly four months afterwards he died in the *Ste. Antoine Hospital*; and, on dissection, a cancerous tumour, as large as the fist, was found at the side of the falx cerebri, beneath the cerebral arachnoid, and lodged in a deep excavation of the middle lobe of the brain. In the case of sudden apoplexy to which we have alluded, the patient a middle-aged woman, had been subject, for some time, to obscure cerebral symptoms, prior to invasion of the fatal attack. On dissection, a tumour of fungous hæmatodes was found in the substance of the right hemisphere of the brain.

Most commonly, and especially when the tumour occupies some portion of the basis, the symptoms of compression are established more gradually; sensation and motion are first diminished and then destroyed in the parts of the body in connexion with the affected side of the brain: the intellectual faculties are enfeebled: and idiocy and

hemiplegia are established. M. Cruveilhier thinks that this train of symptoms is sufficient to point out the nature of the case, but we fear he is too sanguine. Even in those who are attacked with sudden symptoms, he believes that severe pains in the paralyzed limbs, epileptiform seizures, long-established pains in the head and disturbance of intellect before the occurrence of hemiplegia, somnolency, &c. may furnish an intelligible guide to correct diagnosis. We need scarcely observe to practical men that these criteria will often prove deceptive; but still we believe that, if a careful practitioner has his wits about him, he may not unfrequently prognosticate, from such data, the nature of the disease. It is well ascertained that these cancerous tumours are seldom in themselves the cause of death. The fatal termination is induced by serous effusion between the membranes, arachnitis, more frequently still an apoplectic extravasation of blood, or extensive contiguous ramollissement. An important point is the difference of effect produced by disease of the same intensity in different individuals. As this, however, is little susceptible of satisfactory investigation, we leave it to those who have leisure or talent for unravelling the mysterious doctrine of susceptibility of habit. No doubt the position of the tumour and the direction which it takes must exercise influence in determining the relative quantum of mischief. With these remarks we proceed to the detail of particular cases. These are illustrated by coloured lithographic plates of the morbid lesions, conveying their nature to the eye in a very clear manner; if not so highly finished as some in this country, they are equally faithful, and, by reason of their cheapness, more generally useful.

CASE 1. Hemiplegia—Epileptic Convulsions—Cancerous Tumour of the Dura Mater.

Lecouvreur, æt. 65, was brought to the Maison de Santé in August, 1829, with hemiplegia of the right side. There were also severe pains throughout the body, and attacks like epilepsy occurred at long intervals. The intellectual faculties continued

unimpaired, and the patient died at length worn out with sloughs on the sacrum and trochanters, the consequence of pressure.

Sectio Cadaveris.—On raising the scalp a considerable tumour was discovered over the parietal, and near the coronal suture. Its texture was spongy with bony spiculae intermixed; it extended through the cranium to the dura mater over the superior longitudinal sinus. The inner table of the skull was in part absorbed, the tumour extended still farther in the diploë, and on slitting open the longitudinal sinus it was found to contain some small végétations of medullary matter. Besides this, two roundish cancerous bodies, grew from the dura mater in the angle between it and the falx; they pressed upon the brain, and the larger had occasioned a deep excavation in the left hemisphere, whilst the smaller was lodged in a similar manner in the right. The convolutions beneath had disappeared, and in the left hemisphere the contiguous white cerebral matter had undergone a remarkable gelatinous ramollissement.

A very good plate of the disease is appended, together with some learned observations on the case. It is enough to remark that it offers an example, both of medullary tumour growing from the inner surface of the dura mater, and arising in the cranial diploë.

CASE 2. Medullary Tumour growing from the falx, in a patient recently lithotomized.

M. R. ætatis 65, having undergone lithotomy without success, was, sometime afterwards, attacked with a cerebral affection, succeeded by paraplegia of the lower extremities. In spite of M. Dupuytren's objections he insisted on submitting to lithotomy, which was done on the 13th of August last. Cerebral symptoms supervened, and the patient died on the 16th.

Sectio Cadaveris. A large quantity of serum flowed from between the membranes; the brain itself was healthy. On the anterior extremity and right side of the falx, was "a fibrous tumour," the size of a large nut, lodged in a corresponding depression of the

hemisphere. The arachnoid was healthy. The kidneys were large and soft. There were three sacculated stones in the bladder, and several little hollows capable of containing calculi. The cerebral tumour itself was hard, almost cartilaginous, and yielded on pressure a milky juice.

CASE 3. *Fungus of the internal surface of the Dura Mater—torpor—diminution of voluntary motion.*

A woman, ætatis 45, complained habitually of headache, and shortly before her admission into the Maison de Santé, was totally unable to walk. On admission, in September, 1829, her symptoms were, constant reclinon on her back—immobility both when asleep or awake—involuntary discharge of urine—constipation. The left inferior extremity appeared to be weaker than the right; the left commissure of the hips to be depressed; she spoke but gruffly and with slowness; and she complained of pain in the forehead. The pulse was feeble, but varied in frequency. M. Cruveilhier suspected some tumour within the head. She died suddenly on the 3d of October.

Secitio Cadaveris. A tumour reached from the inferior surface of the dura mater to the right of the falx cerebri, lodged in a depression in the anterior part of the right hemisphere of the brain. The depressed convolutions were atrophied, but not disorganized. The tumour was knobbed, traversed by numerous vessels, soft in texture, and consisted of a pulpy substance with innumerable granulations disseminated through it.

CASE IV. *Fungus from the interior of the Dura Mater, penetrating into the nose.*

A man, about 30 years of age, was affected with perfect amaurosis, from which he recovered for one day, but immediately relapsed. He died suddenly and unexpectedly. On dissection, the inferior and internal parts of the anterior lobes of the brain were converted into a tubercular mass, which had destroyed the cribriform lamella, and entered the nasal fossæ and the ethmoid

cells. No vestige remained of the olfactory nerves, the optic commissure was pressed upon, and the orbital portion of the optic nerves was reduced to little else than neurilemma. It was said that the patient complained of the fetor of pus, and took tobacco with pleasure.

CASE V. *Fungus on the surface of the Brain—sudden Hemiplegia—Epileptic seizure.*

J. D. Glaber, ætatis 66, had long complained of headaches and debility, when in June, 1829, he was suddenly attacked with hemiplegia on the left side. On the 15th of August, he was seized with violent convulsive motions, confined to the paralysed limbs, which lasted for half an hour. Debility made progress, slight stupor succeeded, and on the 9th of September he expired, retaining all his consciousness to the last.

Secitio Cadaveris. Beneath the arachnoid, on the surface of the right hemisphere, near the union of the anterior and middle lobes, was a fungous tumour the size of a nut. The brain was pressed on, and its convolutions destroyed; around it presented the yellow ramollissement.

This completes the list of cases related by M. Cruveilhier. We have abridged them considerably, but probably our readers will not quarrel with us for that. We have given sufficient details to shew that the symptoms will vary in different individuals, but still the majority suffer from headache, partial palsy, or other slight cerebral symptom, before the hemiplegia, or the coma, or the sudden apoplectic seizure supervene. If these circumstances be considered with care, if the patient have a more than ordinarily sallow aspect, and if his age be rather advanced, the practitioner may frequently be enabled to prognosticate the existence of a tumour within the cranium. We have said that the age is commonly advanced, and for proof of the assertion we appeal to facts. In the present series of five cases, three patients were above sixty, and the youngest was thirty. We should mention before we quit the subject, that all the cases are ac-

accompanied in M. Cruveilheir's valuable work with coloured plates depicting the particular lesion.

XXVIII.

LIVES OF BRITISH PHYSICIANS.— HARVEY.

WE had only room to glance at this publication in some late articles, and introduce an extract from the life of Dr. Gooch. We shall probably, however, find that several passages in these lives may be capable of furnishing wholesome food for reflection from time to time.

Speaking of HARVEY, the biographer informs us that, though choleric and passionate in youth, that great anatomist was good-natured and cheerful in manhood and age. His antagonists were treated with modest and temperate language—a great contrast to their own—and he ever praised those from whom he differed in opinion.

"He was a great martyr to the gout, and his method of treating himself was as follows:—He would sit with his legs bare, even if it were frosty weather, on the leads of Cockaine House, where he lived for some time with his brother Eliab, or put them into a pail of water, till he was almost dead with cold, and then he would betake himself to his stove, and so it was done. He was troubled with insomnolency, and would then get up and walk about his chamber in his shirt, till he was pretty cool, or even till he began to shiver, when he would return to bed and fall into a sleep."

But the more interesting topic relates to the practice of so great a man. He died worth 20,000 pounds—a sum not very large to be left by a court physician, who must have been at least 50 years in practice. One of his intimate acquaintances declared that he would not give threepence for Harvey's prescriptions, they were so complicated and heterogeneous—an error not now run into, but rather the reverse. The following passage might be made to bear upon some liv-

ing characters—and still more upon some who have lately gone to their long homes.

"It is probable that Harvey was too much occupied in the pursuit of knowledge, too intent upon making discoveries in the world of science, to have cultivated the habit of quickly discriminating ordinary diseases, or to have become very expert and ready in the employment of the resources and expedients of the practical art of medicine. That his business declined after the publication of his doctrine of the circulation of the blood, he himself complained of, and ascribed to the opposition and jealousy of his rivals; but it is more likely that the habits of abstract speculation in which he now began to indulge caused him to neglect the usual arts of gaining the confidence of the public, which if a physician once possess, he needs not the countenance, and may boldly set at defiance the envy, of his professional brethren. The example of Harvey may be regarded, therefore, as a splendid illustration of the truth of the opinion of a late celebrated physician, as declared in his posthumous work: 'That the most successful treatment of patients depends upon the exertion of sagacity or good common sense, guided by a competent professional knowledge.' If anatomy alone were sufficient to make a great physician, who ever could have been put in competition with Harvey?"

We are inclined to think that there is some foundation for the popular notion, that he who is an ardent cultivator of any collateral science, or even of any one branch of the elements of medical science itself, is seldom a good practical physician or surgeon. The reasoning by which this notion might be supported must be based on the melancholy fact, that the longest life of attentive observation, at the bedside of sickness and death, is insufficient for the acquisition of an accurate knowledge of the phenomena of diseases and the operation of their remedies. The seduction of the auxiliary sciences, then, might be urged as a bar, or at least an impediment, to the highest advances in practical knowledge of which an individual was capable. That there is some truth in this train of reasoning there

can be no doubt; and many dead as well as living examples might be quoted in illustration. But we fear that such examples and such reasonings are too eagerly laid hold of by the indolence of mankind to cloak ignorance—or rather to palliate its existence. We do not like therefore, to hear the auxiliary sciences despised by practical medical men; while, at the same time, we would advise those who are candidates for public patronage, to beware of dedicating more than a rigid and wise proportion of their studies to the auxiliary sciences—or to any one branch of elementary medical knowledge. A distinction gained in this way may prove gratifying to the feelings, but injurious to the professional interests of the individual.

We are inclined to believe that it was the incessant devotion to physiological pursuits, rather than the "jealousy of his rivals," that caused the declension of Harvey's practice. We cannot, indeed, judge accurately of the operation of the same causes in the time of Harvey, as compared with our own days. But, in the present state of things, the jealousy of rivals, we apprehend, goes for little in obstructing real talent. Patronage and favouritism may and do push people into notice, who, if left to their own resources would never be heard of; but we question whether the most rancorous hatred or jealousy can materially obstruct the progress of genuine talent and undeviating rectitude of conduct. This last is generally indispensable to final and complete success. For although the CHARLATAN may fill his pockets, and the manœuvring REGULAR may gain a march on his more honest and honorable competitor, TIME usually dispels the illusion, and proves that "HONESTY IS THE BEST POLICY."

XXIX.

DIFFICULTIES OF ANATOMY IN AMERICA.

WE see by the American journals that our brethren on the other side of the Atlantic labour under the same embarrassment as

we do, in regard to dissection. The Massachusetts Medical Society has issued an address to the community, on the necessity of legalizing the study of anatomy, in which they appeal to the feelings—and indeed to the self-interest of their non-professional countrymen, by relating numerous facts illustrating the dire effects of a defective knowledge of anatomy. We hope, and indeed believe, that these illustrations are somewhat too highly coloured—and one of them we grieve to see not only inserted, but, in some degree warranted by our esteemed contemporary, the Journal of Medical Science for May last. We shall quote this melancholy case, and we trust that every thinking reader will agree with us that it is a misrepresentation—an almost palpable impossibility.

"The Address, after some general observations on the indispensable nature of anatomy to the accomplished physician, which are sufficiently familiar to every medical man, goes on to quote several striking instances of the loss of life from patients falling into incompetent hands. An aged practitioner reports more than a hundred persons, under his own observation, dying from strangulated hernia, and the question is very naturally asked, 'how great must have been the number in the whole of New England, who perished miserably from the same cause?' There are also several interesting cases given, somewhat at large, of death from the accidental wounding of large arteries by the ordinary implements of husbandry, and other instruments. There is much good sense in making these statements, because positive instances of evil, are always more readily comprehended than mere abstract argument, and where a question of human misery is concerned, our sympathies are inevitably excited. It has been our misfortune to witness several of those horrors in the practice of surgery, arising from an ignorance of anatomy on the part of operators. If there were no other object in view than to stigmatise an individual, charity would induce us to suppress the narrative, but as an important argument is in question, it is proper to adduce it. During the brilliant campaign

of our army, in 1814, on the Niagara frontier, many cases of severe wounds required surgical operations. A surgeon occupying a distinguished station through his commission, but certainly not through any professional qualification, was a chief operator. We saw this person, in an amputation of the thigh, *fail to cut through the great sciatic nerve; after the bone was sawed through, the limb still hung on by this nerve; ignorant of its nature, he made a plunge at it with his saw, the screams of the poor soldier attested the concentrated agony of a thousand operations, until the operator was implored by an assistant to desist and to use a knife.* A captive officer of the enemy was wounded in the fore-arm, by a musket ball, and from the division of an artery, the bleeding was profuse; several days were spent in attempting to arrest it with a tourniquet. The pressure of the latter at length caused great tumefaction of the limb, and threatened mortification. The same operator instead of taking up the main artery above the wound, amputated the limb, and the operation being performed while it was in a state of inflammation, the pain was immeasurably augmented, and the poor fellow finally fell a victim to the want of scientific skill."

We have put a passage in italics, and we conscientiously believe that an error has crept into the record. How could the integuments of the thigh be retracted so as to leave the bone bare for the saw, with the great sciatic nerve, and many soft parts between it and the bone undivided? We think the thing impossible! And as to the attempt to saw through the nerve—it is so absurd, that the most ignorant carpenter would not have dreamt of such a procedure. It is also a great inconsistency to suppose that any man who was a "chief operator," and consequently who must have been able to tie arteries and amputate limbs, should have been entirely ignorant of what a large nerve was when laid bare in an operation. We consider ourselves as DENIZENS of America—and for the honour of that land which has adopted us, we take the liberty of remonstrating with our transatlantic contempo-

rary, and request him to reflect on a passage which casts a deep reflection on his professional brethren.

XXX.

MOLLESCENCE OF THE BRAIN, WITH DESTRUCTION OF SEVERAL IMPORTANT PARTS, UNATTENDED BY PARALYSIS OF MOTION OR FEELING. Reported by M. SAEATIER.*

THE following case is calculated to awaken caution in our confident diagnosticators, who can pronounce on the most obscure, as well as on the most palpable diseases.

Case. Ant. Gallopin, aged 42 years, a baker, entered the Hospital Saint Louis on the 2d of April, 1830. He had come from the country to Paris, for the cure of pains in his limbs. He had travelled on foot a long journey in cold weather, which exasperated the pains in his legs. Sometimes these pains were attended with numbness of the parts. He never had rheumatism—nor swellings of the legs. He appeared (3d of April, when examined) to be of a robust constitution, muscular, and possessing a good appetite—pulse a little accelerated—abdomen soft—no pain of head. He was left without medical interference for a few days, to see what repose and warm baths would do. On the 5th, it was found that the pains still continued without any diminution. He was, therefore, subjected twice to an alcoholic fumigation, without any relief. A rigorous examination of the lower extremities was made, but nothing whatever could be detected. When desired to walk, it was evident that he staggered. In the middle of the night (7th) he got up in a state of delirium and lay down on the stairs, where he remained till carried back to the ward. When visited on the morning of the 8th, he was found lying on the right side, his lower ex-

* Hôpital St. Louis.

trémities drawn up, and his arms flexed. The face was not flushed, but the pupils were dilated—breathing slow—no paralysis of any of the voluntary muscles—no want of sensibility in any part. He kept his jaws closed, and the tongue could not be seen. It was suspected that the patient laboured under “acute ramollissement” of the brain. He was bled to 12 ounces, and leeches were applied behind the ears—purgative lavement—12 grains of calomel divided into four doses—sulphate of soda in whey—rigorous diet.

9th. The blood was not inflamed—the pulse is slower and softer—the patient speaks, but answers incoherently. He now opens his mouth, and takes drinks, &c. The pupils are still dilated—no loss of sense or motion in any part. The calomel and lavement have produced no effect. Sinapisms which had been applied to the feet had scarcely reddened the skin. Fifteen grains of calomel were ordered, with a purgative lavement and neutral salts.

10th. Some alvine evacuations; but no change in the state of the patient, which continued till 12 o'clock of the 12th of April, when he expired.

Dissection. The skull-cap being raised, the external surface of the dura mater was seen studded with white substances, giving it the appearance of a network of fine lace. The sinuses were gorged with blood, as were the pia mater vessels. At the anterior and superior part of the left hemisphere there was an irregular excavation in the substance of the brain, produced by ramollissement. It was about a line and a half in depth, and the size of a ten-sous piece. The membranes covering this part were notably thickened, apparently from inflammation. The bottom of this excavation contained a softened pulp, of a grey colour; but without any pus or blood. The surface of the brain generally was rather soft, and, when sliced, the cortical part had a rosy yellowish tint. The cineritious structure presented some striæ of a reddish colour. There was nothing else particular in the brain till they came to the corpus callosum, when they found the left ventricle prodigiously distended by transparent fluid. The

corpus callosum was softened throughout—and, in fact, the surrounding parts were softened down into a mass of disease. The thalamus nervi optici of the right side was softened on its surface. The left thalamus was still more softened.—*Journ. Hebdom.*

Thus, then, till within a few days of this man's death, there was no other symptom of so much destruction going forward in the brain than pain in the lower extremities! The suddenness, too, of the serious symptoms would have induced a person to suspect some hæmorrhage on the brain. The case is instructive in the prognostic and diagnostic departments of our difficult science!

XXXI.

CASE OF SECONDARY HÆMORRHAGE, IN WHICH THE SUBCLAVIAN ARTERY WAS TIED ABOVE THE CLAVICLE. By M. S. BUCHANAN, M. D. Surgeon of the Glasgow Royal Infirmary.*

This interesting case is detailed at great length in the last (XI.) Number of our esteemed Glasgow cotemporary; and we shall here present a concise analysis of the case.

Case. Will. Stewart, aged 55, was admitted on the 19th April, under the care of Dr. Weir. He had been attending a vat with boiling solution of alum; and by the fumes from which he was overpowered. He fell down, and the right hand and fore-arm dropped into the boiling lye. In this state he was found by his fellow workmen, and taken home insensible. When brought into the hospital, two days afterwards, the whole of the arm, from the elbow to the points of the fingers, seemed quite dead, the skin like boot-leather. The hand and part of the fore-arm were insensible—the pulse barely perceptible at the wrist. A consultation determined that amputation should be de-

* Glasgow Royal Infirmary.

laid, and a variety of local and general means were used, such as turpentine dressings—poultices—calomel and opium, &c.

"Two days after admission, he had some head affection, indicated by the pain of forehead, and incoherence, as well as by the contracted state of the pupil, and the partial paralysis of his left arm. There was also present another most important symptom, and which I beg your attention to, as of great consequence in all cases of extensive injuries, I mean the appearance of the skin and adnata; these were of a pale yellow colour, and remained so till the very last, and I have almost invariably found this symptom, one of the most unfavourable which in such cases can occur. Indeed so much impressed have I always been with this peculiar appearance of the countenance after traumatic inflammation, that when I now observe it, I draw the most unfavourable prognosis, and I am sorry to say it proves too frequently the correct one. Forty leeches were applied to the head, after which the cold lotion was had recourse to, the bowels were freely opened, and the other medicines continued." 234.

On the 22d the incoherency having ceased, and a line of separation having appeared, an incision was made through the whole length of the fore-arm, which was a putrid mass; and two days afterwards (24th) amputation was performed above the elbow. There was some hæmorrhage, and four arteries as well as the brachial vein were obliged to be tied. The dressings were removed on the 3d day—the flaps were found wide open—the surface brown and sloughy—the discharge offensive. Œdema had spread up the arm, and to the right side of the chest—the constitutional symptoms were not favourable, the skin still retaining the unnatural colour—the tongue dry—the stools green—pulse small and compressible. Stimulants were now given, and the stump dressed with terebinthinate applications. Half a glass of wine every hour was given. Under this treatment the patient rallied considerably. On the 30th April, Dr. W. resigned, and Dr. B. took charge of the ward.

"When I took charge (says Dr. B.) this forenoon, the appearance of matters did not much please me, more particularly the hæmorrhage, for I observed that one ligature still remained, whether that around the humeral artery or vein was uncertain, and from the state of the stump, you may well understand my anxiety; I saw also, that the bed-clothes and mattress were soaked with blood and discharge from the stump, and though there was a pretty good pulse remaining, yet this was all that I had to depend on. About eight o'clock in the morning of the first of May, I was summoned to a consultation, hæmorrhage having again taken place. The bed and surrounding dressings were deluged with blood, the stump of the same foul appearance, the countenance pale, the features sunk, and the extremities quite cold; in short, he was moribund. In this state the members of consultation saw him, and were of opinion that, as he had only a few minutes seemingly to live, it was quite out of the question to propose any operation. Meantime as I was most anxious that his strength should be supported, and death deferred for some time at least; in other words, that it should not be said that hæmorrhage had killed the patient, I ordered warm brandy and wine to be administered in such quantity as his stomach would bear.—He had lost, from seven o'clock, A. M. at which time the hæmorrhage had first been observed, about two pounds of blood, but at last by firmly compressing the subclavian artery, and the application of a hard pad and bandage to the brachial, high up, further loss had been prevented. I may also state that, on looking at the surface of the stump, before leaving him, I found that the last ligature was gone, probably having come away with the first gush of blood. But you remark that there was a most difficult point of practice; I had Scylla and Charybdis to avoid, I must throw in stimuli and prevent death from mortification, and if this is accomplished, and the pulse and strength rally, hæmorrhage will again undoubtedly occur. I chose the former as the safest procedure, and determined, come what might, to ward off, as long as possible,

the fatal event, by the means above referred to.

Contrary to the expectation of the consultation, in the morning, this poor man recovered most wonderfully, by the visit hour, 1 o'clock, when I was again under the necessity of requesting the opinion of my seniors in attendance, and though this consultation is not recorded in the journal, I think it of considerable moment, and shall, therefore, in a few words state to you the result. A majority were of opinion that the patient should be allowed some further time to recruit, and then that the subclavian artery should be tied, and this opinion was enforced by the observation that he might lose so much blood during the performance of so hazardous an operation, that death might take place while he was on the table, an occurrence this at all times to be looked to, in any case, even the most desperate, as reflections of the very worst kind are apt to arise, however unfounded. The minority thought that the above blood-vessel should, without delay, be secured, and this last opinion was rendered the more striking, by the probability of further hæmorrhage taking place, and thus putting it out of our power altogether to move our hands; besides, it was remarked, that if this operation is performed in a dexterous and bloodless manner, then all is safe, at least on this side; and the only risk is of sinking from mortification, which can, from the man's appearance, since the morning, be avoided, by the means lately adopted; as in all such cases the opinion of the majority carried, and the same practice was steadily pursued, of supporting the strength, and of careful and constant watching.

At 6 o'clock in the evening, another consultation was called, in consequence of the pulse getting up, and also oozing to some extent having taken place from the surface of the stump, commanded, as formerly, by pressure on the subclavian. At this consultation all were agreed on the propriety of having immediate recourse to tying the above blood-vessel, but it was suggested, that before taking the knife, it might be as

well to examine, with care, the surface of the sloughing stump, and see if the main artery could not be laid hold of with the tenaculum and tied. This idea, however, the moment the stump was looked at, was abandoned, and now all were decided.

Having informed the patient what was going to be done, and had all properly arranged, I turned his head a little to the left side, and requested my colleague, Dr. Parry, to depress the right shoulder, I then took my seat, and having, with my left hand, kept the skin of the neck upon the stretch, I began my incision with a common scalpel, through the skin and cellular substance, from the acromial edge of the trapezius muscle, onwards to the clavicular portion of the sterno-cleido-mastoideus, and about two lines above the clavicle. The first thing that came in my way was the external jugular vein; this I carefully drew to a side, and then cut through the platysma myoides, and superficial cervical fascia, which was here of considerable thickness. The nerves proceeding to the axillary plexus, now presented themselves, and were with ease drawn aside, the cellular substance, the connecting medium between them, being separated with the point of the finger. The immense subclavian vein was now seen, completely lying upon, and covering the artery; and though in the dead subject this vessel is found under, and to the side of the arterial tube, yet, in the living, it swells out, and causes some trouble to turn aside. This part of the operation, however, as well as the detachment of the artery from its firm connexion to the first rib, by the side of the scalenus anticus, I with great ease accomplished, with the assistance of a silver scalpel, an instrument of great use, in all operations, where delicacy of touch is required.

Having now advanced through these steps of the operation, an obstacle of some moment presented itself, to the passing of the aneurismal needle from below upwards; this was the clavicular portion of the sterno-mastoid muscle, which I was under the necessity of cutting, and then with the greatest ease the common needle was passed close by

the side of the scalenus anticus, which proves so infallible a guide to the arterial tube. Having now satisfied myself, as well as all my medical friends, who had favoured me with their presence and assistance, that the subclavian, and it alone was isolated above the needle, I proceeded to tie it, and this I without difficulty accomplished, by carrying my two fingers, with the ends of the ligatures at their points, down to the bottom of the wound; a single stitch was put in the centre of the wound, and its lips brought together, with adhesive plaster, and simple dressing above. The operation did not occupy more than ten minutes; there was not so much as two tea-spoonsful of blood lost, and the pain was seemingly very trifling.

Much has been written with respect to the difficulties of this operation, and the trouble of passing the aneurismal needle from below upwards, and many have been the ingenious inventions to facilitate this part of the operation; I must confess, however, that, in my opinion, these difficulties have been sadly magnified, and here, as in most similar cases, books are of very little use, nay I think they often do harm; for if any one has dissected the parts frequently, and noted well their relative situation, I would advise him to take his own way of management, heedless of the intricate and often confused directions of systematic book-makers."

The diurnal details of the 2d, 3d, and 4th of May, we need not detail. He sunk gradually, and expired on the latter day. The inspection is short, and cannot be condensed.

"The contents of the cranium were healthy, but the *plexus choroides*, and the internal structure of the *cerebrum*, were rather paler than natural. On the right side of the chest there were strong adhesions, seemingly of long standing, and in both cavities of the pleura, more particularly on the left side, a considerable quantity of serum was effused. The substance of the lungs, the pericardium, heart, and large blood-vessels, were healthy. The abdominal and pelvic viscera were all in a healthy state, with the exception of the liver, which was considera-

bly enlarged, and the posterior part of the right lobe of a very soft, friable texture; the gall-bladder also, and biliary ducts, were gorged with inspissated dark-colored bile. The integuments at the anterior and right side of neck having been dissected back, the sterno-mastoid muscle, with the sterno-hyoid and thyroïd cut, and turned aside, the *arteria innominata* was brought into view, at the giving off of the carotid; the scalenus anticus was now also cut, and turned aside, and the subclavian artery well seen, with the ligature firmly tied round it, and a hard clot of blood perceptible on its cardiac side; the clavicle was now removed, and the axillary artery traced under the pectorals, onwards to its termination in the stump, during which transit it seemed quite healthy, till about an inch below axilla, when it assumed a soft greenish appearance, and no clot could be discovered on the distal side of the ligature. The muscles surrounding the shoulder joint were soft, green, and matted together, and a large collection of fetid pus extended from the stump, below the axilla, to the under surface of the pectoralis major and minor; the whole substance of which last, was in the same gangrenous state as the muscles of the shoulder joint."

Many judicious remarks are made on the case by the talented reporter; but we are unable to give them a place here. We quite agree with Dr. B. that death was not occasioned in this case by the last operation, but by the spreading of the traumatic gangrene, whose progress was accelerated by the hæmorrhage both during the operation and afterwards.

"But it may be asked, what was the cause of the secondary hæmorrhage on the 7th day after the amputation? I think this admits of a very satisfactory answer; not only from an inspection of the blood-vessel, but also from the colour of the blood discharged, its quantity, and its suppression, by the application of the thumb, to the subclavian, as it passes over the first rib. All these circumstances show that the hæmorrhage came from the main trunk. The ligature round the blood-vessel still remains; and on inspecting its cardiac side, the hard

clot of blood which nature has formed, can be traced into one of the nearest branches."

XXXII.

SURGICAL OPERATIONS PERFORMED AT THE DESIRE OF PATIENTS.

WE find in the *Revue Médicale*, for March, 1829, the following interesting observations on this subject, by M. Paillard; they may be considered as expressive of the sentiments of M. Dupuytren. It is generally observed that severe operations, performed against the opinion of the surgeon, merely to comply with the desires of the patient, are rarely successful. Whatever precautions are taken to insure success, death often supervenes. Although the surgeon explains to the patient all the hazards of the operation, and consequently has nothing to reproach himself with, still the idea of having been the cause of the death of an unfortunate person, must painfully afflict him. The case we are about to relate, is calculated to render surgeons exceedingly circumspect, and induce them to refuse with firmness to perform operations merely to satisfy the patient. M. Dupuytren has seen the most violent symptoms supervene in consequence of the amputation of a deformed great toe. In another instance, death followed the extirpation of a supernumerary finger in an adult. A case is related of amputation of a badly-formed leg, by M. Dupuytren, which terminated fatally, and the same result took place in a case of a similar kind, operated upon by Sabatier.

The following case was communicated to Dr. Paillard by Dr. Sterlin. An old servant had been affected for some time with an ulcer of the leg which would not cicatrize permanently. Tired with being constantly obliged to attend to a disease that returned continually, he entered the Hôtel Dieu, of which Pelletan was then first surgeon, and earnestly solicited him to perform amputation. M. Pelletan at first refused, but final-

ly yielded to the solicitations of the patient, and consented to operate, not however without previously explaining to him all the hazards he encountered; but the patient was inflexible. The first few days every thing seemed to promise a favourable termination, but quickly violent symptoms supervened, some important viscera became violently inflamed, and the patient was soon in the utmost danger. Just before his death he collected his strength, and in an energetic manner, and with an eloquence that would not be suspected in an uneducated man, he reproached M. Pelletan for his weakness in yielding to his solicitation. He died some moments after having thus given vent to his anger. M. Pelletan was of course very much affected by this painful scene, and long preserved the remembrance of it. *Amer. Journ. of Medical Sciences.*

We happen to have seen three instances of a similar kind, one of which we shall here state. During the late sanguinary and protracted warfare between France and England, it is well known that the villainous policy of Napoleon caused the prisoners of both nations to be immured for years in a wretched and mournful captivity, without hope of liberation but by death! It happened that the Editor of this Journal had charge, for a short period, of the hospital of the great dépôt at Forton, near Gosport, after the death of the late Dr. O'Beirne, and the following case occurred, shortly before he took charge of the hospital, and under his own immediate observation.

One of the finest and most active of the French prisoners, a young man, who spoke English fluently, and was much employed by the English officers of the establishment, had the ring finger of one hand contracted at right angles, the result of an accident which occurred before his captivity. This crooked finger was to him a great source of annoyance, and he repeatedly solicited Dr. O'Beirne to amputate it. The Doctor, who was a very sensible and shrewd surgeon, declined the operation for a long time; but, at length, the importunities of the Frenchman prevailed, and the finger was adroitly

amputated in the presence of the Editor of this Journal. Every proper precaution was taken, in respect to diet and medicine; but, in a few days after the operation, irritative fever came on, and this fine young man died!

Two other instances have occurred, of nearly a similar kind, within the observation of the writer, and the whole have impressed him with a strong aversion to operations performed in health for the removal of deformities. A young lady, of distinguished beauty and accomplishments, had, within these few years, one of her toes amputated by Sir A. Cooper, in the presence of the writer. She narrowly escaped tetanus. This was for a deformity, which prevented dancing!

XXXIII.

SUBCUTANEOUS NÆVUS TREATED BY THE SETON. By MR. FAWDINGTON.*

Case 1. J. Gaskell, three weeks old, was brought to Mr. Fawdington, in June 1825, with a subcutaneous nævus of a bluish colour, about the size of a walnut, situated deeply behind the angle of the jaw. It had been first observed a fortnight after birth. An astringent lotion was prescribed, but in six weeks the disease had made considerable progress. It had taken deep and firm root between the mastoid process and the angle of the jaw; was of oval shape, and measured from above downwards 5 inches and a quarter, by 4 inches in its transverse direction. Above it extended as far as the zygomatic arch, surrounding the ear, and elevating its lobe; below it passed to three quarters of an inch below the level of the base of the jaw; anteriorly it reached to midway between the angle and the symphysis; and posteriorly its most prominent part would project a little more than an inch beyond a perpendicular line drawn through

the meatus auditorius externus. It was soft and compressible, possessed a slight thrill, was of purplish colour, and large veins ran conspicuously over it. In various parts, especially just beneath the ear, the capillaries of the skin were assuming the state of the cutaneous nævus. The cries of the child, or any similar exertion, augmented the size of the tumour; the general health continued unimpaired.

Mr. Fawdington, reasoning on erroneous premises, determined to tie the carotid artery, which he did with some difficulty on the 9th of July. The ligature separated from the vessel on the 17th, but, as might be readily anticipated, the tumour was little diminished by the operation. On the 24th, an undulatory motion, not amounting to pulsation, was distinguished in the temporal artery. On the 20th of August all hopes of success from the ligature of the carotid artery were abandoned, and Mr. F. made trial of the method recommended by Mr. Abernethy—pressure and cold applications. At the end of a fortnight the surface was excoriated, and the size of the tumour increased.

On the 10th September a seton was passed through the tumour in its long direction. Precaution was taken to make the skin of sufficient size to close and compress the apertures made by the needle in order to obviate the danger of hæmorrhage. A kind of boil formed at the upper part of the tumour, which was partially inflamed, and appeared to become the seat of several small abscesses opening into the track of the seton. On the 26th, no traces of the morbid structure were visible in the upper two-thirds of what had been the tumour, except that the surrounding veins continued larger than usual. The lower third had, however, undergone no change, and a seton was therefore passed transversely through it. As in the former instance, inflammation, suppuration, and destruction of a great part of the tumour ensued; but one part, the size of an almond, remaining, the seton was withdrawn, and the nitrate of silver introduced through a canula passed in its track; was applied to this stubborn remnant of the malady. On the 2d of February not a

* North of England Med. Journ. No. I.

trace of the morbid growth remained. The cicatrices were insignificant, but accompanied with some degree of puckering and depression of the skin. On taking a front view of the face a slight irregularity was observable in the contour of the side affected, and it likewise appeared rather fuller than the opposite.

The case is accompanied with two coloured lithographic plates, exhibiting the condition of the patient before and after the adoption of the measures we have mentioned. The following are Mr. Fawdington's comments on the subject.

"The ligature of the carotid in the foregoing case arrested the increase of the swelling, but appears altogether to have failed in its cure. This circumstance would excite no surprise, when we regard the numerous vascular inosculation existing in the situation of the tumour, if there were not cases on record of indisputable success from the operation in question. Besides those related in the *Medico-Chirurgical Transactions* by Mr. Dalrymple and Mr. Travers, which, by the way, appear to have been instances of arterial nævus, and one subsequently by Mr. Wardrop, clearly the venous nævus, in which the utility of the operation was more questionable, the latter gentleman has recently had the most complete success from tying the carotid in a case, so far as I can perceive, very similar to the one which is the subject of these remarks. The cause of failure, then, in the present example, I shall leave it to the profession to solve; and, while I am inclined to entertain a preference for the seton in similar cases, as regards situation and extent, I take leave to say that, it is only in consequence of the experience developed in this paper, on the one hand, favourable to the latter measure, and, on the other, discouraging in respect to the former.* Both

measures, I am aware, required further trial; and it was the disappointment in the result of tying the artery, and an unexpected degree of success from the process by the seton in this case, which induced me, with Dr. Hull's concurrence, to adopt the latter in the following instance; a choice between the two, in consequence of the size and situation of the tumour, being the only advantage left to me."

We are not acquainted with Mr. Wardrop's successful case. If Mr. Fawdington alludes to the one that occurred at Panton Square, he is mightily mistaken in his ideas of the result. Has Mr. F been blinded by the impudent mendacity of the lying Journal? Is he ignorant of the base metal it palms upon its customers as current coin? The bare appearance of a case in that magazine of mendacity, is sufficient to involve it in doubt and suspicion. With respect to Mr. Travers' case, it is generally acknowledged that the cure was not wholly attributable to the operation. But allowing that one or two such tumours have been benefited by tying the carotid, the instances of failure have far out-numbered those of success. Such an operation is not a bagatelle, nor a step to be tried in the way of an experiment. In the case of Dr. Macfarlane, of which we have given an account, the patient died in consequence of its performance, and in that of Mr. Wardrop, he also sank from its remote effects. Such warnings should not be thrown away, nor are we rashly and obstinately to expose individuals to destruction. We have, on former occasions, protested against the application of the Hunterian operation for aneurism to affections of this description. The best

* "The uncertain result of this operation is well exemplified in the communication of Dr. Mussey, which may be read in the Number of the *London Medical Gazette* for April 17th, 1830. In this case, the tu-

mour was situated on the vertex, and both carotids were tied within twelve days, with little permanent advantage, the disease afterwards requiring to be extirpated. This was done six weeks after tying the second artery, at the expense of a considerable share of hæmorrhage; from the consequences of which, however, the patient eventually recovered."

informed members of the profession are of the same opinion, and it behoves less experienced men to be chary in their attempts to gain operative fame.

Case 2. Eliz. Tetlow, ten months old, had a small subcutaneous nœvus on the forehead since birth, which, during the last two months, had increased so as to occupy the left half of the forehead, encroaching on the eyelid, and extending over the anterior half of the corresponding parietal bone. It presented the venous character, was of leaden colour, and had no pulsation. The cutis did not participate in the disease, and although the eye-lid could not be voluntarily raised, yet on raising the palpebra, no trace of it could be discerned beneath the conjunctiva.

The seton was passed through the long diameter of the tumour and retained for nearly three weeks, but the diseased part was only destroyed in the immediate neighbourhood of the thread. It was therefore withdrawn, and a strong solution of the sulphate of copper injected into the channel left by it. A degree of inflammation succeeded, but the lateral parts of the nœvus remained unaltered. Another seton was introduced transversely with partial benefit only, and a stick of the nitrate of silver was introduced into the opening. Extensive and severe inflammation followed and threatened to run into sloughing, but this was avoided by soothing applications. Chronic inflammation was left behind, and occasional leeching with evaporating washes were required. At the end of three months every trace of the disease had disappeared, but the inflammation occasioned by the nitrate of silver had spread to the palpebral conjunctiva, and occasioned granulations and thickening. The granulations were excised, yet the eyelid did not admit of being completely closed, and the veins in the vicinity remained more dilated than natural. Some, but not much, disfiguration remains, whilst the eye-lid still continues thickened and incapable of being elevated fully.

“Though the seton in this case was not alone competent to curve the nœvus, yet, it

must be confessed, that it contributed in a principal degree to that end, and afforded the opportunity, additionally, of modifying the application of caustic in such a manner as to preserve the integument. It is obvious from the situation and dimensions of the tumour that neither ligature, excision, nor the caustic, in the usual way of employing it, could have been judiciously adopted; for independently of the risk of hemorrhage, or the deformity which would have been thus occasioned, the particular functions of the parts implicated, especially the eye-lid, would have been essentially impaired. Though the progress of the cure was tedious, and the little patient at one time apparently in hazard from excessive inflammation of the part, the result, upon the whole, was gratifying; and the case instructive, as it teaches the fact, that, caustic applied internally to the morbid growth, does not necessarily involve the destruction of its integuments; at the same time, that we should be moderate in its use when thus employed: for, it is to be remembered, that this agent is not intended to act so much in directly disorganizing the diseased texture, as in setting up a destructive inflammation, by which its obliteration appears to be effected. Upon this principle, indeed, the method of treatment by seton is recommended.”

Case 3. George Crowther, a healthy child, ten months old, affected with a nœvus, chiefly subcutaneous, yet partly affecting the cutis, about the size of the section of a pullet's egg, projecting from the forehead immediately above the left eye-brow. It began as a small red cutaneous spot, when the child was three weeks old. On the 7th April, 1828, a seton was passed through the tumour. Some swelling and inflammation followed; and on the 20th the seton was removed. On the 1st of May the tumour was about half its former size; on the 7th another seton was introduced transversely. This caused greater inflammation and swelling than the former, and the whole of the nœvus appeared to be obliterated. On the 19th this seton was taken

out likewise. Much induration of the parts included within the seton openings remained behind, and after awhile a portion of nævus the size of a horse-bean re-appeared. It is proposed to remove this by excision.

"We are therefore entitled to conclude, that though the seton has not completely succeeded in this instance, in obliterating the morbid structure, it has arrested its growth, and reduced it within a compass, which allows of the interposition of another remedial agent that might be applied safely, and insure the least imaginable deformity. I am quite aware that either excision or the ligature was applicable in the first instance; the latter especially, might have been adopted with certainty, and even the former would not have been attended with hazard, if a competent assistant had been employed to compress steadily the circumference of the incision, while the operation was in progress. But with the view of creating as little disfigurement as possible, I was led, from the evidence of the preceding cases, to select the seton; and the event, though not such as to entitle it to be called 'a perfect cure,' appears to warrant the procedure, and to be not altogether unworthy of the notice of the practical surgeon."

Such are the cases adduced by Mr. Fawcington in advocacy of the employment of the seton for nævi materni. Our readers may form their own conclusions on its powers and advantages. For our parts we see but little to recommend it in preference to the means in common use. If a surgeon is consulted in the early stages of the tumour, he certainly has no business to allow it to attain considerable magnitude, and, as far as we have seen, we should say that the disease is seldom allowed to advance very far before his assistance is required. For moderate sized nævi then, we have no hesitation in asserting that excision or the ligature is infinitely preferable to the seton; and the ligature may be employed though the tumour should have attained a considerable size. The case lately published by Mr. Brodie is sufficient to establish the truth of this position.

It is obvious, however, that the nævus may be of such magnitude, or so situated in such a particular spot, as to render excision or the ligature improper. In such cases our readers are put in possession of the experience of Mr. Fawcington, respecting the value of the seton. Let us glance at the results. In the first case the seton was required to be twice introduced, and at last the nitrate of silver was necessary; abscesses and sloughs formed in the nævus, and a good deal of constitutional irritation was induced; the cure was complete. In the second, the seton was twice introduced, sulphate of copper and nitrate of silver were applied, severe disturbance followed the latter, and the nævus was only cured, with granular and thickened palpebral conjunctiva. In the third, the seton was also passed twice, but a portion of nævus remained for excision. This is the true state of the question, and practitioners may see that although the seton may prove useful in some cases, it is not to be deemed a very efficient, nor yet a very mild mode of treatment. Such at least may be deduced from the foregoing facts, if so few can be fairly considered as entitled to settle a point of this description. By the way we should mention that Mr. F. takes much pains to draw the line between subcutaneous nævus, appearing to be chiefly a venous structure, and the pulsating nævus of arterial and aneurismal character. He might have spared himself much trouble on this point, as the distinction was drawn long ago. He will find it, no doubt, in Cooper's Surgical Dictionary. On the whole, our author's paper is interesting, and the facts it contains are valuable. If we differ in our inferences, we do so with candour and a feeling of respect.

XXXIV.

M. DUPUYTREN ON VARICOSE ANEURISM.*

THERE are two duties imposed on the

* Repertoire d'Anatomie. Tome 8.

medical journalist. The first is to announce to the public what is new, and the second, equally, nay more important, to remind them from time to time of what is true, although it may want the smooth varnish of novelty. If the son of David was right when he said that nothing new could be found beneath the sun, it is obvious that the man who lives only on such provender must starve; and we think we may venture to affirm, that the accuracy of the Hebrew Monarch is more quickly apparent to none than the editors of medical journals. They speedily discover the nothingness of discoveries, and find that the novel ideas of our teeming and prolific periodical contributors are not unlike the produce of Suffolk dairies—treble skimm'd sky blue.

We were led to these disheartening reflections by the perusal of a memoir on varicose aneurism, from the pen of M. Dupuytren. It is ushered in with a pompous flourish by our able confrères of the *Répertoire*, but we really deem it more indicative of judgment and good sense than of any extraordinary ingenuity or talent. We think we shall be doing no disservice to the English reader by putting him in possession of the opinions and experience of the eminent surgeon of the *Hôtel Dieu*. His observations are communicated in the form of a letter to M. Husson, M.D. on the case of a young gentleman, who had been wounded eighteen months previously by a fowling-piece, charged with small shot. These had passed through the shoulder from before backwards, about the height of the cervix humeri, and a varicose aneurism in the right axilla was the consequence. It is amusing to find, that M. Dupuytren, who has lately been accused of robbing John Hunter of the merit of originating the operation for aneurism now in use, attributes to him on this occasion an act to which he can lay no claim. It was not he, but Dr. William Hunter, who first gave a description of the aneurismal varix, in the *Medical Observations and Inquiries*. Before we revert to the subject matter of the memoir, we must take the opportunity of making one remark. When

the puncture of the artery and vein communicate directly and immediately with each other, no pouch or sac intervening between them, the affection is called "aneurismal varix." This was what was originally described by Dr. Hunter, but he afterwards pointed out a variety of this affection, in which a sac of aneurismal character, and formed from the cellular membrane, is placed between the wounded vessels. Later writers have designated this a varicose aneurism.

Now this was the case in M. Dupuytren's patient. There was present a small, round pulsating tumour between the artery and vein, accompanied with dilatation of the axillary veins, and a thrilling noise produced by the impulse of arterial blood into them. From the situation of the wound it would appear that the vessels had been wounded high up, but on accurate examination M. Dupuytren ascertained, that this was not the case. The shot had entered them near their termination in the brachial division, a circumstance probably occasioned by the position of the limb at the time of the accident. M. Dupuytren considers *seriatim*, the modes of treatment admissible in such a case. A question immediately presents itself to the surgeon:—is the disease productive of much inconvenience, or is it likely to prove dangerous? In the present case, the inconvenience is slight, being confined to a little weakness and swelling of the limb. With regard to future consequences, M. Dupuytren believes that if the patient observes moderation in diet, and in other points, little need be apprehended. If mischief should occur, it would then be time to think of remedial measures.

Of these the first on the list is compression. In general this is difficult and painful; but in M. Dupuytren's case impracticable, from the situation of the artery enveloped in the axillary plexus of nerves. Independently of this, compression would be improper in a case of old standing, as the opening between the artery and vein becomes rounded, and almost incapable of uniting at its edges.

The same objection lies against the liga-

ture of the artery above the disease. M. Dupuytren declares that it *frequently* succeeds in recent varicose aneurism, but almost always fails when performed at a late period. In the former, the edges of the opening are not indisposed to inflammation and union, and the temporary stoppage of the circulation by means of the ligature on the artery above, allows of the completion of those necessary processes. In the latter, the edges being indisposed to unite, the blood gets round into the artery below the ligature, by means of the anastomotic channels, and from thence it passes through the opening into the vein and intermediate sac. The pulsation of the latter, and the dilatation, &c. of the vein subside for a short time after the operation, but generally reappear in three or four days. The facility for the reflux of the blood in the varicose aneurism is much greater than that afforded by ordinary aneurism for reasons sufficiently obvious. In order to place a varicose aneurism in the same condition by an operation, as the common aneurism is after tying the artery above, it is necessary not only to do this, but likewise to tie the vein above and below the opening in its side. This, however, has never been attempted.

M. Dupuytren believes that the co-existence of a sac with the arterio venous communication renders the chances of success from the Hunterian operation greater, in as much as the disease approaches nearer in character to ordinary aneurism. He thinks notwithstanding that it would be safer to apply a ligature above and below the aneurismal sac. Supposing it is determined to operate in this manner, two plans will present themselves to the consideration of the surgeon. Either the two ends of the artery may be tied at the same time, by opening into the aneurismal sac, or the latter may be left untouched, and the vessel tied alone with two separate ligatures. The former is attended with many inconveniences, with difficulty, delay, and even danger. The blood flows into the sac through the venous opening, fills up the wound, and embarrasses the operator. The lower part of the artery

should be first secured, in order that the pulsations may still direct the operator to the upper portion. In the other operation the inferior end of the vessel is at once cut down upon and tied without any intermeddling with the sac, and then the superior is treated in the same manner. M. Dupuytren concludes by adverting to an operation to which we before alluded, viz. tying the upper portion of the artery, and applying a ligature to the vein above and below the wound in it. To this he appears to hint a preference, above the other modes of proceeding. With reference to the particular case on which the foregoing remarks were founded, it is to be understood that M. Dupuytren advises nothing in the way of operation to be attempted, till urgent symptoms shall arise to require one.

We have given a faithful abrégé of M. Dupuytren's sentiments, without interrupting the tenour of their course by comment of our own. We must say that we doubt the propriety of the operation of tying the vein. Superficial veins, like the saphena or those of the upper extremity, are extremely prone to fatal inflammation; a danger sufficiently attested by the general abandonment, in this country, of the different operations for varices. This we think is a valid argument against M. Dupuytren's proposal.

The opinions entertained by British surgeons, on the treatment of varicose aneurism or aneurismal varyx, may be shortly stated as follows. If the disease shows no disposition to increase, and it usually does not, no operative measures are required. Scarpa, Hunter, Bell, and others mention cases of the aneurismal varyx that remained stationary for a great number of years. Compression has been tried, and in several cases it is said to have succeeded. Under favourable circumstances, we should think that moderate compression would be highly proper in the early stage of the complaint. Two cases are recorded in the Medical Facts and Observations, in which the varyx being complicated with aneurism that threatened bursting, the sacs were opened, and a ligature placed on the artery above and below the aperture in it. If an opera-

tion were rendered indispensable by the increase of the sac, or other circumstances, we should prefer tying the artery above and below the sac, without making an incision into latter. Such we believe to be the present extent of our information on this subject.

XXXV.

IDIOTISM AND APHONIA, FROM FRIGHT, DURING UTERO-GESTATION.

THE following curious case, related by Madame Boivin, the famous Parisian midwife, had escaped our notice in the *Journal Complementary*, and we take it from the *American Journal of the Medical Sciences* for May, of this year.

"A female, aged twenty-three, nervous constitution, bilious temperament, dark brunette, a mother at the age of twenty, her labour taking place at the seventh month of pregnancy, in consequence of bad treatment from her parents. The accouchement was preceded and followed by an abundant metrorrhagia and frequent faintings. Her health was however restored, and she left her paternal mansion and went to Paris. She again became pregnant, and at the sixth month of utero-gestation she became extremely jealous, violently reproached and menaced her lover, who after vain attempts to calm her, threatened to have her removed from his dwelling by force, and went out to seek a police officer. The patient immediately hid herself, and it was not until after a long search that she was afterwards found in a closet of a wardrobe. She was found in a state of stupor, which was at first supposed to be feigned. But nothing that could be said could induce her to leave her retreat or change her attitude or expression. It was necessary to remove her, and a physician was called, who thought that the patient was feigning. She however did not speak, nor make any signs; she did not exhibit any wants, and preserved any position

in which she was placed. In this state she was taken to *La Maison Royal de Santé*, August 20th, 1820, two days after the occurrence, and was placed under the care of M. Duméril. She was here carefully watched by a special attendant. Her aspect at this period was frightful—her black hair stood erect on her head—her dark face, thin and excessively pale—her large black eyes, surmounted by thick eyebrows of the same colour, were fixed and prominent—her mouth wide open, and her chin resting on her chest. When any one entered her chamber, she turned her head, looked aside with an expression of fear, afterwards examined the person attentively as long as they continued in the room. She did not speak nor move; it appeared as if she did not understand any thing that was said to her. Her appearance was so hideous that she was called by the other patients the vampire,

This singular state was unaccompanied with fever. An infusion of orange leaves, and a draught with ether, were ordered; but twenty-four hours elapsed without its being possible to induce her to take a cup of this liquid: she had not taken any thing during the preceding two days. In the course of the fourth day, the sixth from the attack, she refused as usual the drinks which were offered her; but she made signs that she wanted an empty bottle that was in her sight, which was given her, when she put into it some of the fluid, and drank for the first time during six days. She had only urinated once, and then in her bed, and had not slept during this period. She continued afterwards to take drinks, but only with the bottle. A *douche ascendante* produced an evacuation from her bowels for the first time in six days.

The fifth day she took a little soup, and she was taken into the garden. She sat upon the ground, collected together the sand, selected the pebbles and shells that she found in it, and amused herself as if she were an infant of two years of age. Some one pretended to wish to take them away from her; her face immediately took on an expression of great anger, and afterwards she wept heartily. When the pebbles were

returned to her, she exhibited a stupid joy. She continued this puerile amusement during twelve days; her speech did not return, and she did not give any sign of a return to reason.

The sixth day a large blister was applied to her neck, but neither during the drawing or dressing did she exhibit any signs of pain.

On the eighth, the shower bath was ordered. The patient on being stripped entirely of her clothes, made no resistance. When the water fell upon her she appeared seized with fright; her limbs were violently agitated; but she did not attempt either to raise or remove herself; she neither groaned nor cried; her respiration became suspended; finally, syncope came on, from which she was with difficulty revived. After being placed in bed, she slept many hours. She showed afterwards by signs that she remembered the shower bath.

On the twelfth day she showed by signs that she had pains in her right leg. A flying blister was applied to her knee, and the pain disappeared. From this period she attempted to speak; she moved her lips, but she did not articulate a single word.

The fifteenth day, when she was asked how she had passed the preceding night, she took a piece of paper and pencil out of the hands of the interrogator, and wrote down an answer. She asked at the same time where she was; and appeared much astonished on being told that she was in a hospital in Paris. During three days

she communicated in this way with her attendants.

On the nineteenth day she was attacked with pain in her back, which becoming more violent, she uttered a shriek and afterwards exclaimed, 'Ah! mon Dieu!' The attendants surprised and frightened, repeated the exclamation, and ran into the passages and wards, crying the vampire has spoken. The patient in her turn appeared equally surprised at what was passing around her; her attendants on recovering from their surprise, re-entered her chamber to congratulate her. She inquired of them what there was extraordinary about her? whether she had not spoken before, and said she believed that they had been deaf. When her history and appearance were detailed to her she joined heartily in the laugh.

From this period she continued to speak with facility, and even very agreeably. Her appearance became very pleasant, and her eyes assumed an expression of the utmost mildness. She did not recollect any of the circumstances which had preceded or attended the disease; not even the shower bath, which had produced so violent an effect.

The sight of her lover, who visited her during her disease, did not produce any effect upon the patient; she regarded him at first with fright, as she did others.

The patient remained in the hospital until after her accouchement, when she was discharged well.

CLINICAL REVIEW.

XXXVI.

ST. GEORGE'S HOSPITAL.

MALIGNANT DISEASE OF THE LUNGS.

In our last report from this hospital we related two cases of empyema and one of pneumo-thorax, and we promised to com-

plete the series by detailing the particulars of some instances of malignant disease of the lungs. Fungus hæmatodes not unfrequently attacks these organs, but genuine scirrhus is more rare. Of the former we have witnessed numerous examples, of the latter we do not remember one. Fungus

hæmatodes of the lungs may occur as a primary or a secondary disease, with an external tumour or without one. It is not uncommon for patients who have submitted to operations for fungus hæmatodes of the extremities, the breast, the testicle, to die at a subsequent period, with sudden symptoms of effusion into the chest; and on examining their bodies, the lungs are found affected with the original disease. Such is the experience of Mr. Brodie. Our present business is not with such cases, our intention is to confine ourselves to fungus hæmatodes or scirrhus, originating spontaneously in the organs of the thorax.

Some slight notices of this affection will be found in the works of Dr. Baillie, and in the observations of Mr. Wardrop on fungus hæmatodes. But they are superficial, and furnish little more than an advertisement, that such a disease does exist in the lungs. As far as we know, the subject has not yet received any material elucidation from the labours of English writers. M. Bayle described it more at large under the designation of 'cancerous phthisis.' His description conveys a fair quantum of information, but theory has thrown a slight shade over his facts, and morbid anatomy has advanced some strides since the days in which he wrote. The most complete, yet succinct, enumeration of the anatomical characters of the disease, will be found in the work of M. Laennec. Our readers should hasten to peruse his chapter on medullary tumour of the lungs, and up to a certain point they will find their curiosity amply gratified. But in that we search in vain for symptoms; like the rods of the Magi of Pharaoh, they are swallowed and absorbed by the Aaron-like wand of morbid anatomy.

Perhaps it will be better before we proceed to individual cases, to mention in a rapid and cursory manner the chief varieties of medullary tumour discovered in the lungs. We will not enter on the history and progress of the morbid growth, as our readers must be fully acquainted with most of the professed treatises on this subject. Laennec then divides medullary tumours into the en-

cysted, unencysted, and diffused. In the first, the tumours are usually numerous, small, enveloped in a cyst of more or less thickness and consistency, and commonly divided by firm cellular tissue into several lobes. The second, or *unencysted*, are frequent, varying in size from a hemp-seed to that of a full grown foetal head, spheroid or irregular in shape, lobulated, invested with cellular membrane of greater or less consistence according to circumstances; they are most frequent in the limbs and larger internal cavities. The third variety, or the *diffused*, in which the organ or organs is infiltrated with the medullary matter has never been seen by M. Laennec in the lungs, nor have we observed it in any part of the body. We therefore pass it by without further notice. In concluding this short exposé, we may remark that the distinction between encysted and unencysted medullary tumour is often insusceptible of close discrimination. Most of the medullary growths in the lungs are enveloped in a thin cyst, in their earlier stages, and in proportion as they advance the boundaries grow less defined on the one hand, or more perfect on the other. When the lung is becoming more and more implicated in the malady, the line of demarcation is feeble, is lost; where chance or the processes of nature have arrested its march, lymph deposited around forms a bolder barrier.

Another important point remains. Whatever be the kind of medullary tumour, three well-marked stages are noticeable in its progress. In the first, the depositions are small, and white, and intersected with few blood-vessels; the constitution seems to sympathize little, the nature of the malady cannot be suspected. In the second, the morbid growths have advanced in size, their fine pearl-like colour is somewhat dimmed, the centre shows a disposition to soften, large blood-vessels run from the neighbouring parts to the surface, and others of some magnitude display a partial or universal network in the centre; now is the time for small extravasations of blood to take place in the tumours; for the constitution to

sympathize; and for symptoms to be set up. In the third stage, the tumours have spread rapidly and widely, and softened as they spread: the extravasations of blood are numerous, and often so extensive as almost to destroy the medullary character of the disease; the patient is evidently wearing away with pain and irritation and profuse sweats, and at length he either dies exhausted, or is suddenly cut off by effusion on the other lung.

With these preliminary observations we proceed to the report of individual cases.

FUNGUS HÆMATODES.

CASE 1. *Contraction and subsequent Enlargement of Left Thorax—Sudden Symptoms—Death—Fungus Hæmatodes of Left Lung.*

Benjamin Long, æt. 27, ostler, admitted Dec. 16th, 1829, under the care of Dr. Hewett.

Cough—sensation whilst coughing of a knife cutting him in left side—decubitus on that side—inspiration very imperfect and wheezing—uneasiness in the throat—emaciation—aspect phthisical. Pulse very frequent and weak—skin cool. Sweats at night.

Attacked six weeks ago with cough, dyspnoea, sharp cutting pain in the left side sometimes extending to the right, and frequent chills succeeded by fever and thirst. For the first fortnight he spat very small quantities of blood, of a scarlet colour. After three weeks of illness he convalesced; but a fortnight ago he experienced a relapse, and has since suffered from the present symptoms; the night-sweats have been present for a week. Was previously a healthy man—has not been bled for this attack. *A blister—salines with digitalis, &c.—and mild sedatives.*

On the 20th a more precise examination of the case was had recourse to. The pain in the side had been diminished by the operation of the blister—he suffered from a rather troublesome cough—the sputa were very scanty, and merely transparent mucus or rather glairy, frothy fluid—the pulse was small, frequent, soft—and he was disposed to attacks of vomiting.

The left side was less expansible than the right, and also measure less, the respiration on this side was inaudible; the sound universally dull. There was no ægophony. The right side was very sonorous, and the respiration was puerile.

It was supposed that the left lung was consolidated, and the pleuræ united after pleuropneumony. It was evidently a case of contraction of that side.

We need not specify the particulars of the treatment: it consisted in attention to the bowels, and quiescent remedies. Physic could not remove an organic change, and violent measures were carefully avoided by Dr. Hewett. On the 4th of January, the patient thought he had caught fresh cold, for the cough was more annoying, but the sputa remained as before. He had also pyrosis, for which alkalies were ordered. The bowels being irregular, sometimes costive, sometimes too relaxed, and the febrile action becoming more prominent, some blue pill with digitalis and opium were given every night for three or four weeks, without in the least affecting the mouth. During this time the prominent symptoms were the cough, nocturnal perspirations, scanty, transparent and glairy sputa, and occasional sense of "tightness" at the chest, for which leeches were applied. On the 14th a slight streak of florid blood was noticed in the sputa. The action of the heart now attracted attention; it was tumultuous and appeared extensive. On applying the stethoscope, no beat nor increase of impulsion were perceived, but the sounds were louder and heard more extensively on the left side than usual. The organ was thought to be somewhat dilated. On measurement the left side was one inch less than the right.

On the 13th of February a few sanguineous striae were again observed in the transparent sputa; the right side now sounded unequally beneath the clavicle on percussion, and about the second or third rib pectoriloquy was thought to exist. It was queried:—*Tubercles in upper part of right lung—a small romica?* On the 27th he complained for the first time of "flying rheumatic pains in the right side of the chest and shoulder."

Volatile liniments were applied, but on the 3d of March the pain was found to be more severe; the sputa were more copious and opaque and contained some blood; the hectic was well-marked. Leeches to the side with demulcents were the means employed.

On the 24th both sides of the chest were found to be of *sinular dimensions*: consequently the left had gained an inch within the last few weeks.

In the morning of the 30th he was seized with vomiting of glairy mucus, and at 1, p. m. he had a rigor, followed by slight pyrexia, and pain in the head. Effervescing draughts, and a mustard sinapism to the epigastrium were ordered. On the 1st of April the vomiting continued, with pain in the stomach, small and frequent pulse, anxious countenance, and slight delirium. A blister to the epigastrium—effervescing draughts, with the liquor opii sedativus. By these means the vomiting was partially relieved, but in the evening there supervened severe pain in the left side of the chest, increased by motion or pressure; little cough—no expectoration. The left side now measured $\frac{3}{4}$ of an inch more than the right—ægophony was heard below the axilla and over the scapula.

It was clear that effusion had taken place between the left pleuræ.

Early in the morning of the 5d the patient died.

Sectio Cadaveris; 28 hor. post mortem. Body emaciated, but not so much so as in phthisis pulmonalis.

Thorax. Some old cellular adhesions between the pleuræ on right side. Upper lobe of right lung presenting some scattered groups of miliary tubercles. In anterior part of lung, immediately below the pleura, and about two inches from the apex, a single vomica, somewhat larger than a nut.

Pleuræ on left side, united by old adhesions in various parts anteriorly; very firmly adherent posteriorly, and inferiorly joined by cellular adhesions, into and between which a pint or more of recent bloody serum, with a few flakes of lymph had been effused.

Left lung irrespirable throughout; its volume rather diminished than increased.

It was almost universally occupied with masses of fungus hamatodes, not encysted. They varied in size, were irregular in form, and generally of whitish colour. Some were slightly softened, others very much so, and the centre always showed this state the best. In some parts the distinctive medullary character had disappeared, the texture of the lung was in great measure converted into a puriform, putrid-looking boullie, and the whole bore a certain resemblance to the diffuse suppuration of this organ; it differed from it, however, in many material points. The most disorganized portions of the lung were the inferior and posterior; at its summit was a trace of mere carnification.

Between the pleura pericardica pulmonalis, and diaphragmatica, was a mass of rather fatty-looking matter, which appeared to have been deposited in the cellular adhesions between the pleuræ. Vessels passed to it from the latter.

Between the great bronchi, pressing on the œsophagus and the aorta was a separate mass of fungous matter, chiefly consisting of the disorganized bronchial glands. The great left bronchus was surrounded by it, encroached on, and amalgamated to it in such a manner, that the cartilaginous rings could no longer be felt, and the diameter of the tube was exceedingly diminished.

Considerable quantity of serum with flakes of lymph in the pericardium, which was more opaque than natural. At the angle of reflexion between the loose and adherent pericardium, opposite the left auricle, one of the medullary masses protruded in some measure into the pericardiac cavity. The membrane was not destroyed but appeared, though thinned, to be still reflected over the morbid growth.

Heart and great vessels nearly natural.

Abdomen. Viscera healthy. In the lesser omentum, a small suspicious-looking mass.

Cranium. Not examined.

We shall make but a few remarks on the present case, and pass as quickly as possible to the next. If our readers will peruse the details with attention, they cannot but be struck with the remarkable precision

conferred by the stethoscope on the diagnosis. Of course the cylinder could not lead one to pronounce that the disease was fungus hæmatodes; to do that, it would require an instrument of sight as well as hearing. But it shewed that the whole of the left lung was irrespirable and consolidated—that the pleuræ in the first instance were united, and subsequently separated by sudden effusion—and it led to the suspicion, if it did not prove the existence, of tubercles and a vomica in the other lung. The diagnosis was nearly as correct as human diagnosis can be, and they who affect to laugh at percussion and auscultation, would do well to form as accurate opinions. But no, it cannot be! In spite of prejudice, in spite of learning, in the face of neglect, and in the teeth of opposition, auscultation will prevail; for truth, like freedom, is ever victorious.

Its battle once begun,
Bequeath'd, like it, from sire to son,
Tho' baffled oft, is ever won.

CASE 2. *Large Tumour on the right Side of the Chest—Absorption of some Ribs—Fungus Hæmatodes of the Lungs.*

James Rickards, æt. 25, a gardener from Aylesbury, admitted April 28th, 1830, under the care of Mr. Brodie.

Nearly globular tumour on the right side of chest, extending from the lower margin of the 4th rib to the 11th, and from near the angle of the ribs posteriorly to within an inch of the cartilages anteriorly—generally firm and elastic—giving a sense of indistinct deep fluctuation—immoveable on the ribs—rather tender on pressure—and affected with deep-seated pain chiefly felt at nights. Integuments healthy, right side of chest imperfectly expanded on inspiration, which produces pain at the lower border of the tumour—decubitus on the back only—no orthopnoea—some cough. Pulse frequent, rather wiry—perspires at nights—aspect serofulous. Right side of chest anteriorly, above 5th rib, extremely sonorous on percussion; below that, perfectly dull—nearly whole of right back the same. Respiration is sonorous, part puerile—below the 5th rib is speedily lost altogether. Indistinct agophony about 6th rib anteriorly—very

shrill broncophonie in right axilla.

About ten years ago strained himself at cricket, since which time he has always experienced tenderness in the site of the present tumour. This he first observed seventeen or eighteen months ago; it was then no larger than a nut. Two or three months after its first appearance he suffered from a violent, but short, attack of pain in the right side of the chest, and about three weeks ago he had another, which was much relieved by a blister. The tumour has increased with additional rapidity during the last few weeks. Has had cough for about a month—has emaciated considerably.

No doubt was entertained of the malignant nature of the tumour, and the evidence obtained from percussion and auscultation declared, but too unerringly, the implication of the lung below the 5th rib, or at least the extension of the disease within the chest in that situation. The bowels were attended to, mild sedatives exhibited, and leeches applied when the pain became severe.

On the 5th, the tumour was punctured by Mr. Brodie, with a fine grooved exploring needle, but, as had been anticipated, no fluid made its exit. On the 6th, the expectoration which was extremely scanty and merely frothy, was tinged with a streak or two of florid blood. On the 14th the tumour was found to be increasing at its anterior part, and this was the seat of pricking pain, not aggravated by inspiration. He was ordered bark with tincture of iodine, and shortly afterwards iodine ointment was rubbed upon the tumour. On the 23d, he had a fresh attack of severe pain in the situation of the right false ribs, attended with anxiety, dyspnoea, and inability of lying on either side. There was no expectoration whatever. The bark and iodine were omitted, and leeches were applied. On the 27th, there appeared, for the first time, pain in the left side of the chest; there was troublesome cough; scanty expectoration slightly streaked with florid blood; the dullness on percussion had mounted higher on the right side, and its expansibility was perceptibly diminished

It was evident that the disease was advancing in the right lung or pleural cavity. Cupping, a blister, salines with antimony, and sedatives procured a temporary respite.

On the 15th of June we again examined the patient with attention. The tumour had decidedly increased in size, especially on the back—it was softer, but gave not the genuine sensation of fluctuation—the cutaneous veins were enlarging. He had violent pain from time to time in the tumour and right side of the chest, the lower half of which was manifestly bulged out. The breathing was hurried and laborious—he had hectic, and copious perspirations. The whole of the right side was now dull on percussion, and the respiration was only audible below the clavicle, where the voice gave bronchophony. The sound on the left side was now become unequal, and the respiration was generally puerile.

Nearly whole of right thorax occupied by tumour. Tubercles or malignant deposits in left lung.

From this time matters went on from bad to worse—the attacks of pain in the chest were more violent, more frequent, and more prolonged—the dyspnoea grew more distressing—he neither lay down by night nor by day, but could only avoid suffocation by sitting up in bed with his head on his knees, and inclined to the left side—the respiration in the left thorax became more imperfect, and attended with a r le—the heart acted jarringly and tumultuously, so that it was thought to be suffering from chronic inflammation—the prostration of strength was beyond description—and, at length, on the 27th of June, death put a period to the poor fellow's sufferings.

Section Cadaveris. Emaciation—body remarkably bloodless—right side of chest universally dull on percussion—left partially so. Tumour of very great size.

Tumour and Thorax. Tumour covered posteriorly by the serratus magnus and latissimus dorsi muscles—anteriorly, only by the integuments. The tumour was inclosed in a thin cyst. The eighth and ninth ribs were separated from each other for nearly three inches about their centres. Between three

and four inches from their sternal ends these ribs had been absorbed, and were totally wanting for a space of three inches; their ends were rough and jagged. The ribs above and below were entire but deflected by the growth and increase of the tumour. Through the space occasioned by the absorption of the eighth and ninth ribs, the tumour passed into the chest, and appeared to occupy nearly the whole of the right side, and to pass across to midway between the sternal articulations of the ribs on the left side, and the junction of their bones and cartilages. The heart was deflected to the left and partly overlapped by a process of the tumour.

The tumour itself was lobulated, and on section shewed a perfect specimen of fungus h matodes. In parts were rounded masses of medullary matter, in others black recent blood, and in others again dun-coloured lamellated coagula. The upper lobe of the lung was least pressed on, but its texture was inflamed, and contained a number of round, separate, medullary tubercles, mostly of small size. The lower lobes appeared to be deflected towards the mediastinum, and either amalgamated with the tumour, or else so converted into matter of a similar description as to baffle all accurate research. The medullary lobules encroached on the cavity of the pericardium but had not produced inflammation of that membrane.

Left lung studded with innumerable medullary tubera, varying in size from that of a large pea to double or treble the dimensions of a marble. They were all white and cerebriform, without coagula, except to a small extent in two or three. No fluid in either side.

Abdomen. The diaphragm protruded downwards, with a little lymph on the convex surface of the liver, and some bloody serum in the peritoneal cavity. The tumour appeared to send a process downwards by the side of the aorta, but this part of the examination was so hurried, that the fact was not fully ascertained. Liver itself free from disease.

Cranium. Not examined.

We might multiply cases of this disease were it necessary, but the two already detailed are sufficient for our purpose. They show the obscure symptoms attending its origin and progress, for in the first case there was nothing to lead the physician to suspect the existence of fungus hæmatodes, and in the second it was only revealed by the characteristic external tumour. The history of the affection appears to be this. A man of middle age, or generally younger than that, is attacked with what appears to be inflammation of the chest, perhaps accompanied with slight hæmoptysis. From this he recovers to a certain extent, but his health and strength are not what they were before. A permanent degree of dyspnœa, with hectic, more or less complete, remain behind, and on examination of the chest one side is found to be manifestly defective in the exercise of its functions. There is also cough, but not to a great extent; expectoration of frothy mucus, or muco-purulent matter, trifling in amount, and occasionally streaked with a little blood; emaciation, and night sweats. It must be owned that these symptoms are far from decisive, and we find in practice that they prove so. In fact, unless an external tumour or fortuitous circumstances conspire to indicate the nature of the disease, it is hardly possible for the ablest practitioner to do more than guess at its existence.

The obscurity that wraps the diagnosis is not always dispelled with the progress of the malady. It might be thought à priori that the character of the sputa would supply an indication. In general it does not, and indeed it is surprising that fungus hæmatodes should proceed to so great an extent in the lungs, without communicating to the expectoration any traces of medullary matter. In the first case we have detailed, many parts of the lung were no better than a putrid bouillie, and the bronchus was converted into the disease, yet the sputa were no more than frothy mucus. In some cases, however, the expectoration is excessively offensive. A patient affected with this disease was thought to be labouring under

phthisis pulmonalis. Dr. Hewett was struck with the fetor of the breath and of the sputa, and inferred from those circumstances the existence of something more than common consumption. The event amply verified the justice of the suspicion.

For the later stages and the final result we can scarcely do better than refer to the cases themselves. There is certainly some similarity between the symptoms of this disease and empyema. The same description of cough, the same scanty sputa, the same emaciation, the same hectic, conspire to maintain the accuracy of the parallel, not seldom to deceive the medical attendants. But the history of the cases is somewhat different, and the signs supplied by auscultation are quite so. In empyema, an acute attack of pleurisy is followed by ægophony, and the latter mounts with the progress of the fluid. In fungus hæmatodes, ægophony, as far as we have seen, is absent. There may be cases, however, in which some fluid is effused between the pleura, and ægophony thereby produced. This happened towards the close of the existence of Long, the patient whose case we related first. On the whole then, we must return to the position from which we started, that the diagnosis of this disease is frequently involved in impenetrable obscurity, till the knot is cut by the scalpel of the dissector.

For the termination of these melancholy cases, we have just referred to the facts themselves; but, before we conclude, we may venture a few observations on the subject. The patient continues to suffer from hectic, emaciation, slight but teasing cough, and scanty expectoration occasionally streaked with blood. He has evidently some fatal malady preying on the constitution, and sapping the respiratory system. From time to time an exacerbation of the symptoms attacks him. The dyspnœa and cough are more distressing; the pains in the chest are more severe, if they previously existed, or, if hitherto absent, they now become established; the surface is bathed in a dewy sweat; and a deep-seated anxiety is settled on the countenance. In one of these at-

tacks, more violent or more protracted than the rest, the unfortunate patient is cut off. We should say that the "blindness to the future wisely given," so prominent in phthisis pulmonalis, is much less marked in this disease. We might add some more reflections, but we fear that our readers will deem the foregoing more than enough. Our apology is, that they are practical deductions, and not theoretical speculations—the result of what we have actually seen, and not the wild offspring of what we have thought.

Before we conclude we shall add the short particulars of a case of true scirrhus of the lung, communicated to Dr. Johnson by Mr. Calley, of Burton Crescent. The patient was under their joint care. Perhaps more precise details might be desirable, but it is hard to expect the minuteness and precision of a reporter from a gentleman engaged in the hurry and fatigues of practice. The preparation is in the hands of Mr. Davis, and we again repeat that it shews a genuine scirrhus of the lung.

Case. Henry Jennings, 15 years of age, of delicate fibre, consulted me on the 6th January, 1830, with rheumatic pain in the right hip. There was very little febrile action; the pulse small—no rigors—a great deal of lassitude with slight cough—no difficulty of breathing, and could make a full inspiration without pain. There were frequent metastases from the hip to the knee and ankle. He was confined until the 5th of February, at which time he was recovered sufficiently to return to his occupation in the city.

On the 1st of April he came to me again, complaining that his cough was troublesome at night, and as he was of delicate constitution, I recommended his removal into the country for a short time. On his return on the 25th of the same month, I observed a great change in him; he had great oppression of breathing, and was obliged to maintain an erect posture; the chest elevated on the left side, measuring two inches larger than the other—could only lay on that side.

Dr. Johnson was consulted the following day, and stated his opinion and conviction

that considerable effusion had taken place in the chest, accompanied by organic disease. He prolonged a miserable existence until the 1st of July when he expired.

Dissection. On raising the sternum the left lung was found to be almost entirely converted into a whitish mass resembling very firm brain or rather scirrhus, weighing nearly two pounds, and firmly adherent to the sternum. There were five or six pints of clear water in the left cavity of the chest. The heart was rather smaller than usual—the lungs on the right side sound.

General Remarks. He was subject to fits for some time until he attained his sixth year, after which there had been nothing remarkable about him up to the time he had the rheumatic attack. He had been observed these two years past, when sitting and not particularly engaged, to droop his head, and when desired by his friends to hold it up he would often say it gave him pain; and although naturally an active cheerful lad, he often complained of weariness and languor; I understand also that he has had a cough these two Winters, with frequent chilliness.

Medical Jurisprudence.

XXXVII.

ST. JOHN LONG.—CORONER'S INQUEST.

Lethiferque per orbem dicor.

THE race of the above charlatan is run! He and his suborned, bribed auxiliaries of the venal press, may now lay down their heads on their pillows, and sleep if they can, after the perfect conviction that they have sent prematurely to their long homes, some of the most amiable beings of the human race! We were the first to expose the quackeries of St. John Long, and our readers are well aware of the vituperation which that exposure drew on us from venal journals in the pay of the tamperer with human life. The day of retribution has come round—and the remorse which the satellites of corruption must feel, need not be heightened

by any rhetoric from us. We have spoken of REMORSE; but we much doubt whether these gentry are susceptible of any thing of that kind, beyond their own pockets. Their pecuniary interest is now pretty nearly at an end;—for whether any trial for manslaughter or damages may ensue, is immaterial;—the ignorant and reckless deceiver must hide his head and quit the kingdom for ever.

We place the record of this Coroner's inquest on our pages, for several reasons;—but principally for the purpose of enabling our medical brethren to exhibit it to such of their patients as are desirous of putting themselves in the hands of charlatans!—We shall, however, divest it of all unnecessary evidence and irrelevant matter.

CORONER'S INQUEST.

On Saturday morning, at 11 o'clock, an inquisition was commenced before Mr. Stirling, coroner, and a highly respectable jury, at the Gate-House, in the Hampstead-road, on view of the body of Miss Catharine Cashin, who, it was alleged, had died in consequence of the treatment which she received at the hands of Mr. St. John Long, a person residing in Harley-street, Cavendish-sq. professing to be a medical practitioner. The investigation excited the deepest interest in the neighbourhood; and the feeling of anxiety that existed was by no means lessened by the circumstance of the sister of the above named young lady, who was also a patient of the same person's, having died on Saturday morning, a few hours only before the coroner and jury assembled. A solicitor took a seat at the coroner's table, and stated, in answer to a question from the Court, that he attended for a party very deeply interested in the inquiry.

Mrs. Mary Anne Roddis, a lady-like and extremely intelligent woman, was called in and sworn, and gave the following statement, which was interrupted at intervals by the agitation of the witness:—I reside at No. 32, Mornington-place, Hampstead-road, and am a married woman. My husband is a wine-merchant. I knew the deceased about two months; she and her mother and

sister lodged in my house. When I first knew the deceased she was in perfect health, and she continued so until about 10 or 11 days ago. Yesterday (Friday) week I was requested, by the deceased's mother, to accompany her daughter to Mr. Long's in Harley-street, and to state the fears she had respecting the wound in the deceased's back. I complied with Mrs. Cashin's request, and accompanied the deceased, and saw Mr. Long, and drew his attention to the state of her back. He looked at it, and said it was precisely as he wished it to be. The next thing I can state is, that on Saturday morning I was called up to the apartment of the deceased, and found her in the greatest agony. I then looked at the back. Need I state, Sir, the appearances of the back, and the opinion I formed?

The Coroner.—You may state any fact, but I will not ask you to give any opinion.

Witness.—It is impossible for me to describe here the state of her back minutely. It was in a very violent state of inflammation, and she was troubled with unceasing sickness. In the afternoon of the same day I wrote, in Mrs. Cashin's name, to Mr. Long, requesting his immediate attendance. He came between five and six o'clock in the evening. He then looked at Miss Cashin's back, and said he thought it was in a very good state, and that he would give 100 guineas if he could produce a similar wound upon the persons of some of his patients. I pointed out one particular spot upon her back, and asked him what could cause its appearance; and he said it was in consequence of inhaling, which was a part of his system, and unless those appearances were produced, he could expect no beneficial result. He then inquired what I had done, and I told him I had applied a poultice, and given a saline draught to allay the irritation of her stomach. He said I could not have done better, and that he should make no alteration. I then begged him to order something that would allay the irritation of the stomach and bowels. He said it was of no consequence, as that irritation was the effect produced by his system, and it would be of ultimate benefit to her. I then begged that

he would at least give her a composing draught, to which he replied that a tumbler of mulled port wine was a better composing draught than all the doctors in the world could make, for that he hated the very name of physic. I objected to this, but he insisted on its being given. I gave her a wine glass full, which was immediately rejected by the stomach. By Mr. Long's permission I continued the poultices, but she gradually got worse. On Sunday morning last he came again, and said that doubtless I knew better the state of the wound than he did, because I constantly applied the poultices. On removing the poultice on this occasion, I again pointed to the dark spot in the wound, and he said that probably there would be a number of boils come out, and that it was what he wished to produce; and that she was going on as well as he could possibly wish. I then named the exhausted state of the patient, and again pressed his attention to the sickness, as well as did the deceased's mother. He said he had a remedy with him, but that he would not apply it then, because he rather liked the sickness than otherwise. He then ordered her to have a little rhubarb and magnesia, which was immediately given. Between 11 and 12 o'clock on Sunday night he came again, and gave her some medicine which he had brought with him, but which was immediately thrown off the stomach. On my saying that I thought her in a dangerous state, he said my fears were perfectly groundless, and because of my ignorance of his system it was that I was alarmed; and that she would be perfectly well in a few days. She passed a very restless night, and on the following morning I was still more alarmed at the increased inflammation of the wound. The deceased's mother and brother-in-law expressed a great desire to have further advice, and Mr. Brodie was sent for, who saw her about six o'clock in the evening, and ordered a poultice to be applied immediately, and some saline draughts. The sickness was stayed by Mr. Brodie's prescription. Her night was very bad. On the following morning at 7 o'clock, I gave her a saline draught, and in half an hour afterwards she took a small cup of coffee with dry toast. I left her with the nurse,

under the impression that she was drowsy. During the time I was at breakfast, a bell rang violently, and I immediately ran up stairs and saw the deceased in the agony of death. Mr. Foulkes, a neighbouring surgeon, was sent for immediately. I tried to get a tea spoonful of brandy into her mouth, but her jaws were quite set, and she immediately breathed her last. [Here the witness was deeply affected, and it was with difficulty that her husband, who sat by her side, could with his utmost attention keep her from fainting.] I did not state in its proper place, that after Mr. Brodie had seen her on Monday evening, Mr. Long called. On hearing that Mr. Brodie had been called in, he said it was perfectly unnecessary, for that no person could be doing better than Miss Cashin was. Mr. Long did not come or send after that.

The solicitor (Mr. Adolphus, for Mr. Long) said he wished to ask the witness whether the diet which Miss Cashin took was in accordance with the directions of Mr. Long on that head.

Witness.—Mr. Long said he wished his patients to eat and drink whatever they liked; so that there was no restriction.

The Coroner.—What did she eat or drink?

Witness.—She had no appetite for any thing. We tried a variety of things which we thought likely to stay upon her stomach, all of which I told Mr. Long of, and he approved.

Solicitor.—What sort of appearance did the spot of which you have spoken bear?

Witness.—It had a very dark and angry look.

A Juror.—Did both the sisters reside in your house, and did Mr. Long visit them both?

Witness.—Yes; latterly, when Miss Cashin became so ill, he was sent for; but before that they visited Mr. Long. He does not usually visit his patients—they go to him. Miss Cashin used to go with her sister before she became a patient.

Juror.—Is there not some kind of secrecy observed in Mr. Long's practice,—I mean, are not his patients bound to secrecy in some way?

Witness.—I understand there is some-

thing of that sort. I do not know whether Mr. Long was made acquainted with the nature of Mr. Brodie's prescription when he came on Monday evening. It was sent to Mr. Foulkes's to be prepared. I do not know at what particular time Miss Cashin first became a patient of Mr. Long's. She had nothing the matter with her; she had no complaint; but she said Mr. Long's treatment was to prevent any disease in future.

Solicitor.—Was she aware that her sister's back was bad?

Witness.—I do not know. Mr. Brodie saw the deceased's back.

Solicitor.—What opinion did you form of it when you saw it?

Witness.—My impression was, that there was very violent and extensive inflammation, which if not stopped would produce very serious consequences, and I told Mr. Long so; and his reply still was, that it was part of his system.

Solicitor.—Did you point out the spot you have spoken of to Mr. Brodie?

Witness.—I did not call his attention to any particular part of the wound.

Solicitor. Why did you not?

Witness.—Because I thought it would be presumptuous in me to do so to so eminent a man as Mr. Brodie.

Solicitor. But why should you have mentioned it to Mr. Long, and not to Mr. Brodie?

Witness.—If I must answer that question, it was because I thought Mr. Long a very ignorant man, but I knew Mr. Brodie to be otherwise.

By the Coroner.—The inflammation extended all over the back on both sides of the vertebræ. It was at the top part, between the shoulders. The ladies were strangers to me before they came to lodge in my house.

Juror.—When was the wound made?

The Coroner.—The witness cannot know, because she did not see it made.

The witness, whose examination lasted nearly two hours, then signed the deposition and withdrew.

Mr. Benjamin Collins Brodie sworn.—I reside at No. 16, Saville-row, and am a surgeon. I never saw the deceased but once during her life-time. I was sent for on Mon-

day last to 32, Mornington-place, and I went between five and six o'clock. I first saw in the drawing-room a young lady who appeared to be labouring under an affection of the chest. I went up to a bed-room, and there I saw a young lady who was said to have a wound in her back, which it was wished I should see. I looked at her back and discovered a slough, which might be as large as the palm of my hand, all round which the skin was discoloured to a considerable extent, as if it had been inflamed, and was now threatening to become a slough also. Her stomach was very much disturbed, and I was told that she brought up whatever she swallowed directly. I prescribed what in my judgment were suitable remedies, and said I would call on the following day, believing at that time that, although she was very ill, she was not in immediate danger. I was told that the inflammation in the back which produced the sloughing (which term, perhaps, I should explain to the jury, is synonymous with mortification, or nearly so) had been produced by an application made by a Mr. Long, who had been consulted, but of this I have no actual knowledge myself. On the following day (Tuesday) I called again at the house, and found that the young lady had died that morning. I requested that I might see the body, and on examining the back, I found that the sloughing had very considerably extended, and I concluded had been the cause of her death. That is all I know and all I can say. I have no knowledge of how the wound was produced.

Solicitor.—Might not such a wound have been produced by a blister?

Witness.—On a person of very susceptible constitution it might. I was told that she was not ill at all before the wound was made, but that it was made to prevent her from going into a consumption like her sister. On that subject I was informed her mother was very anxious.

By the Solicitor.—Any considerable stimulant applied to the skin of a person of extremely susceptible constitution may possibly produce mortification. A common blister might produce it, but it is not likely. I did not see what application had been made

to the wound, but was informed that it had been poulticed. I was informed that her stomach would not bear medicine, but what I gave her stayed. The wound in her back was quite sufficient to account for the state of her stomach. The slough, as I saw it on the following day, was quite sufficient to destroy any one.

Solicitor.—Did you observe any particular spot?

Witness.—There was a red surface the size of a good large plate, but the sloughing was not so extensive. The centre of the wound was quite black, the rest red.

Solicitor.—If you had seen her on Friday, do you think it likely you could have done her any good?

Witness.—I think it very likely, though to be sure I am unacquainted with her constitution and therefore cannot speak with certainty.

A Juror.—Do you think the application made by Mr. Long to her back was the cause of her death?

Witness.—I think so, from what I have heard.

Juror.—Would inhaling produce such a wound on the back?

Witness.—Not alone.

Juror.—Is there not some secret in Mr. Long's practice? I mean, does he not profess great secrecy, and bind down his patients not to divulge his mode of treatment?

Witness.—I have heard so.

Solicitor.—Might not eating a large quantity of plums cause inflammation in the bowels and stomach, and might not that inflammation extend to the back, and show itself eventually in the form in which you saw it? Is it not possible?

Witness.—I don't know what is possible, but I never saw any thing of the kind. It could not produce such a slough as that upon her back.

A Juror.—You did not, I think, consider her in danger when you first saw her?

Witness.—I thought her very ill, but not in immediate danger.

Juror.—Could the appearances you have described have been produced by inflammation of the bowels?

Witness.—Certainly not. The sloughing could not have been produced by that.

By the Solicitor. The sickness and disturbed state of the stomach would not have occasioned the slough, but the slough was quite sufficient to account for the sickness. The effect of any external application would depend, of course, in a great measure, upon the constitution of the patient. I was told the deceased was in good health ten days ago.

A Juror.—Do you think an application of the kind that has been mentioned likely to prevent consumption?

Witness.—Certainly not. I cannot imagine how such a thing could be.

The Coroner.—Would you consider it warrantable practice to produce such a back in order to prevent consumption?

Witness.—I should not.

A Juror.—Would you think a tumbler of port wine the best composing medicine for her?

Witness.—It might have been very good for her, if the stomach would have borne it; but it was certainly not calculated to quiet her stomach as it then was.

Juror.—Did you not say she had been murdered?

Witness.—I did not mean murdered in the literal sense; but I believe I did say something of that kind; and my opinion was, that she had, in consequence of the treatment she received.

Solicitor.—You have said that the effect produced by any external application would greatly depend upon the constitution of the patient. Then Mr. Long's system, although not beneficial in this instance, might be so in others?

Mr. Brodie (smiling and shaking his head).—I cannot say any thing about that.

A Juror.—If you had visited Miss Cashin before, and had seen the sloughing increase, would you not have thought there was danger?

Witness.—Certainly.

Juror.—Would you have thought she was going on well?

Witness.—No. I have not seen the body since the day she died, but I have no doubt that the sloughing was the cause of her death.

The coroner and jury, with Mr. Brodie and Mr. Wakley, then went to view the body, and on their return several of the jury expressed a strong desire to have the body

opened; one of the gentlemen observing, that although there could be very little doubt as to the cause of her death, and although they would willingly spare the afflicted mother any further trial of her feelings, yet the case was one of such vast public importance, every possible information must be obtained.

An elderly person sitting at the table, who said he was a surgeon, said he hoped the jury would hear evidence that Mr. Long had to adduce on his own behalf. He (the speaker) could bring forward testimony in contradiction of what had been stated, and he himself knew of 50 cases within these two months in which Mr. Long's system had been tried, and not one instance of a failure.

The solicitor said, Mr. Long's professional reputation was at stake, and he trusted the jury would hear both sides.

Mr. Sweetman, brother-in-law of the deceased, said there would be no objection on the part of the relatives to having the body opened, as it was necessary for the furtherance of justice.

It was then directed that the body should be opened immediately, and the inquest was then adjourned until Monday (this day.)

Mr. Long was in the house during the inquiry, and was accompanied by Mr. Van Butchell, and one or two other persons of advertising celebrity.

A great part of the second day of the inquest was spent in very unnecessary alterations—and the evidence of Dr. Thomson was any thing but calculated to enlighten the minds of a non-professional jury. We shall select those parts of this day's proceedings which were at all ad rem.

Mr. Adolphus.—I believe, Sir Francis Burdett, you have had some means of making yourself acquainted with some portion of Mr. Long's mode of practice?

Sir F. Burdett.—I have been admitted to Mr. Long's house, and have seen him practice several times.

Mr. Adolphus.—Did his practice appear to you to be dangerous, or likely to be beneficial to his patients?

Sir F. Burdett.—I should think there was not the slightest degree of danger in it certainly.

Mr. Adolphus.—Were the manners of Mr.

Long those of a mild and humane man, or those of a cruel and unfeeling practitioner?

Sir F. Burdett.—Quite the contrary of the latter certainly. But perhaps I had better state what passed. I went to Mr. Long in consequence of hearing that he had cured two persons of *tic douloureux*, with a view to see whether any relief could be afforded to the Marquis of Anglesey; and, from what I saw, was so convinced there was no danger in his mode of treatment, that having the gout in my hand, I desired Mr. Long to try what effect it might have upon me, more, however, for the purpose of having an opportunity of reporting to Lord Anglesey that there was no danger in the operation, than the hope that it would do any good for the gout. I did report to Lord Anglesey the result of my observation, and I believe he would have had recourse to Mr. Long, if he had not got better just at that time. So satisfied was I from what I saw, and from what I heard from persons attending Mr. Long for advice, of the beneficial effects of his practice, that one or two other individuals put themselves under his care at my recommendation.

Mr. Wakley.—Pray, Sir Francis Burdett, what operation was the Marquis of Anglesey to undergo?

Sir F. Burdett.—I only know that he was to have an outward application by friction. I know nothing of the ingredients of which the preparation that was to be used was composed. I know he operated on others who were labouring under the same complaint, and they told me they had received benefit.

Mr. Wakley.—Do you know, of your own knowledge, of any one who has been cured by Mr. Long?

Sir F. Burdett.—No, I do not. Lord Sligo told me he had been cured of the gout by Mr. Long, and I dare say he was for the time, but how long it would last I don't know.

Mr. Wakley.—Did you receive any benefit from the application?

Sir F. Burdett.—None whatever.

Mr. Wakley.—When did you first see Mr. Long?

Sir F. Burdett.—About two months ago, I think; but I am not sure.

Mr. Wakley.—Was there any injunction imposed upon you as to secrecy?

Sir F. Burdett.—None that I recollect.

Mr. Wakley.—Did you not sign a book?

Sir F. Burdett.—I believe I signed something, but I am sure I do not now recollect what it was. I believe, however, there was something said about keeping it secret.

Mr. Wakley.—Can you judge of the ingredients of the preparation from what you saw of its application?

Sir F. Burdett.—No, I cannot. I do not know what effect it produced, except that it made the skin look red and angry, as is generally the case where friction is used. I saw no appearance of mortification. I saw the process of inhaling performed, but I do not know the qualities of the gas inhaled.

Mr. Wakley.—Have you ever made medicine your study?

Sir F. Burdett.—Oh dear, no.

Mr. Wakley.—Should you be able to distinguish a glass of water from a glass of prussic acid by the appearance?

Sir F. Burdett.—I don't think I should.

Dr. Alexander Thomson was next sworn.—He stated that he lived at No. 70, George-street, Euston-square. He had examined the body of the person reported to have been called Miss Catharine Cashin. He had examined the external parts of the body wholly, but his examination of the internal parts had been confined to the abdomen and thorax. He wished and was about to open the head, when he was informed that it was objected to by the family. He was informed that the mother was lying up stairs in a dreadful state of mental affliction, and that she gave a decided negative to the proposal to proceed with the examination of the head and spine, and of course he was obliged to desist. Mr. Wildgoose, a surgeon, who appeared to conduct the examination of the body on behalf of Mr. Long, and witness, had taken notes of the result of their examination, and they had jointly drawn up a report, which, with the permission of the jury, he would read for their information.

Juror.—Was there not what is called a slough or sloughing in the back?

Dr. Thomson.—I am sorry you have put your question in that way, because it places

me in a very delicate situation. *There was no sloughing. By sloughing we mean the coming away of a dead part.*

Juror.—Was there nothing of that kind in the back?

Dr. Thomson.—I should say, certainly not. The appearances in the abdomen and thorax were the same precisely as I discovered in examining the body of a young lady who died some time ago, at Chelsea, from taking colchicum in too large a quantity. It is by no means an uncommon practice now with the junior branches of the profession to produce what is called counter-irritation, by applying stimulants to one part in order to relieve another. This is found beneficial in certain systems. I again repeat, however, that from what I have seen of the young lady, I cannot found any decided opinion without examining the brain and spine. I have seen death occasioned with less inflammation and general disorganization of the stomach than appeared in this instance, always excepting the appearances in the back, for on no occasion have I seen a back in such a state. The inflammation, therefore, I say, in the stomach was sufficient to have caused death, and if I had found no other appearances than those in the back, I should say that the state of that part was also sufficient of itself to have produced death.

Mr. Adolphus.—Taking all appearances and all circumstances into consideration, would you say that death was occasioned by the wound in the back?

Dr. Thomson.—Taking my means of information from the examination I was enabled to make, I should say no; but I should, I once more repeat, have been able to state a decided opinion if I had been allowed to examine the spine and brain.

A Juror.—If you had seen the deceased 10 days ago perfectly well, would you have caused, by any application, such a state of the back?

Dr. Thomson.—No, unless I wished to kill my patient. Such a thing was never done by any medical man that I know of.

Juror.—Supposing the young lady to have a sister who was consumptive, and that she herself, although in good health, was afraid of being similarly afflicted, and ap-

plied to you, would you have produced such a sore?

Dr. Thomson.—Certainly not. I would never introduce such a sore for the purpose of producing counter-irritation.

Mr. Wakley.—If you had proceeded to the examination of the brain and spine and found no disease there, what would you then have thought the cause of death?

Dr. Thomson.—The disease in the back.

The Coroner said, the only way would be to have the spine and brain examined now, if the Jury thought fit.

Dr. Thomson, in continuation, said, he never saw such a sore as that in the deceased's back, although he had known red hot irons to be applied to the skin to produce counter-irritation. He wished very much to pursue the examination of the body.

The witness here produced a strip of the skin which he had taken from the deceased's back, and which was handed round to the jury, and inspected by the numerous medical men present, Dr. Thomson observing, that any medical gentleman would perceive that there was no slough in it, nor was there any disorganization.

Upon the above evidence we are compelled to make a remark or two. Under what species of mental confusion, or rather delusion, Dr. Thomson laboured, when he denied that the parts were disorganized or in a state of slough, we cannot imagine. We saw the parts. They were disorganized. *They were in a state of slough.* Not a single medical tyro in the profession could have pronounced them to be in any other state. Dr. Thomson indeed evinced some lack of discretion, or at least of tact, in his evidence. A medical audience could scarcely have understood his technical refinements, much less a jury of non-professional people. Mr. Brodie's description of the parts was perfectly correct—that of Dr. Thomson was erroneous.

The next day, Tuesday, the body was disinterred, and examined in the vaults of Moorfields Chapel. We were present at this examination. The brain and its coverings were perfectly natural. The coverings of the spinal marrow were red, but, on the most accurate investigation, with glasses and the naked eye, it was evident that the

red colour was a tinge produced by the blood, and not the product of inflammation. No vessels were perceptible.

The third day's inquest revealed the results of the disinterment and re-dissection in the vaults of the Catholic Chapel in Moorfields. A considerable degree of decomposition had taken place, and the smell of the body and of the vaults generally was most offensive and oppressive. It is useless to multiply the statements of the medical witnesses. They were all in accordance, with the exception of Mr. Wildgoose, whose depositions shew pretty evidently that he was at the dissection as the friend of Mr. Long.

Dr. John Hogg sworn.—Was present yesterday, in the vault in Moorfields chapel, and assisted in examining the head and spine of the deceased. The first thing that struck him as remarkable was the state of the back. It presented between the shoulder-blades a very large kind of eschar; it appeared as if it had been scorched by fire. The body itself was not at all emaciated, but muscular, symmetrical, and in many respects well formed. Dr. Thomson, witness, and others, proceeded to examine the spine; obtained a full view of the spinal cord. There was certainly an appearance on the sheath of the spinal cord, opposite to where the external sore was, of discolouration. This was very minutely examined. On removing it to the day-light, it exhibited a crimson appearance. The other part of the sheath was of a more natural colour. On opening the sheath, it was evidently thickened at the part where it was discoloured; but had no appearance of disease. The cord itself was not at all affected. The examination was next directed to the head. On removing the skull-cap, the brain presented an unusually firm and healthy appearance; portions of it were removed and examined as to its structure, which exhibited a state of perfect health. The brain was perfectly sound at the basis, and at the origin of all the cerebral nerves, and all the nerves emanating from the brain itself. Not having been present at the former examination, it was difficult for him (witness) to form an opinion as to the cause of the death, but should say that the violence which had been done to the nervous system

was quite sufficient to cause death, particularly in the case of a nervous and delicate young lady.

By a Juror.—The sheath of the spinal cord was discoloured from external causes. The opinions of the different gentlemen present at the examination were not communicated to each other; each gentleman made and brought away his own observations. As a professional man he (witness) should certainly not create such a wound on a healthy person. Had not the slightest idea what such a wound could have been made for. Should say decidedly that the lady had not been labouring under the effect of any disease except that of the wound produced on the back, as far as he saw: in death even the body had the appearance of health. Had never seen a more beautifully formed body. Had never seen such a wound produced on an unhealthy person, and should be sorry to produce such a one. If the mother of a patient had gone to him, and said other children of her's had died of consumption, and that she was afraid of the one produced falling a victim to the same disease, there were prophylactics that might be had recourse to, but he should never think of making such a wound.

Dr. James Johnson examined.—I reside in Suffolk-place, Pall-mall east. I was present at the examination of the body yesterday. The sheath of the spine was discoloured, but the whole was not thickened. I do not think the redness was the effect of inflammation. I think it was merely tinged by the blood itself. I conceive that the patient died from several causes, the primary one being the local inflammation, which produced incipient gangrene. The next effect was fever resulting from that inflammation; and, thirdly, the inflammation of the membranes of the stomach and pleura connected with the fever. I suppose the fever to have been produced by the local inflammation, and to have been symptomatic of that inflammation and of the incipient gangrene. I think death was produced by these circumstances combined, all arising from the inflammation in the back. The cause of this inflammation is kept a secret, therefore we can only guess at it.

A Juror.—Could you by analyzation discover what the preparation was which was used?

Dr. Johnson.—No; we might perhaps discover some portions of the preparation, but we could not ascertain what the composition was. I did not examine the body internally. I should not have made such a wound in any disease, and certainly not in a healthy subject.

The following morceau of evidence will explain the observation we made above.

Mr. W. Wildgoose, surgeon, sworn.—Having read the depositions that had been taken, found it difficult for him to say what the cause of death had been. Having nothing else to go by than the appearances after death, he was bound to suppose that the injury which had been inflicted had been the cause of the death, but he could not swear that it was. The internal surface of the stomach and duodenum were inflamed. Inflammation of the stomach could not exist for any length of time without killing the patient, independent of any other injury or disease. Had seen the back, and if he (witness) had nothing to go by but the back alone, he should not have supposed it would have caused death.

By a Juror.—Could not tell whether the inflammation of the bowels could have been occasioned by the state of the back or not: it might or might not by sympathy. Had been in the habit of examining bodies after death. The appearance of the back was somewhat like as if lunar caustic had been applied to the part. The skin was mortified, but the muscles were uninjured. Had seen such injuries before. Had seen deeper ulcerations produced by caustic. Had never seen an injury intentionally produced to such an extent on the back of any individual. Had been called in, and supposing the inflammation of the stomach to have been sympathetic, he might have done something for the relief of the patient. Had no means of knowing what had caused the wound. He should not like to see such a wound on the back of any patient of his. Knew nothing of Mr. Long's mode of treatment.

By Mr. Adolphus.—Knew Mr. Long. Had heard from very respectable people

that he was a successful practitioner. Had known him for some years and seen many patients go to him.

By a Juror.—Did not know until this investigation had begun, whether the persons he had seen go to Mr. Long were patients or visitors, as he had never been inquisitive respecting Mr. Long's affairs; believed part of his plan of treatment to be that of counter-irritation; that was, to produce an external illness for the purpose of drawing off an internal disease. Would not have made a wound so large as this on the back under the circumstances. From what he had seen since death, he did not think he should have been justified in making so large a wound. Consumption consisted of tubercles of the lungs. His conduct in treatment would be much influenced by a mother, or an old woman, saying other branches of a patient's family had died of a consumption, but not so much as to be induced to make such a large eschar as this was.

By Mr. Wakley.—Mr. Long was not studying the profession, nor was he an authorized surgeon when he (witness) first knew him. Could not say how many years, but it was before he began this system. (Great laughter.) Did not know that he had received a medical education. Did not know what trade or profession he was of some few years ago. A short time ago he was a painter. He was not now of the medical profession, but was what was called a professed curer of consumption.

The inquest was adjourned till Friday, the 27th August. We saw some of the boobies who pinned their faith on St. John Long, waiting in the anti-rooms—among the rest, a superannuated medical numbscull, who came hobbling to give his testimony to the wonder-worker of Harley-street!

The lateness of the period at which this interesting and melancholy inquest took place, disables us from doing more than placing the principal facts on record. In another article, we shall take an opportunity of offering some strictures on the evidence, medical and non-professional, which came out on this memorable occasion, and we hope that the said strictures will embrace some important and interesting topics.

Without presuming to determine the final results of this inquest, we venture to predict that it will lead to some of a very salutary nature. We think it will rouse the legislature to a Parliamentary enactment that may check the career of charlatanism, by pointing attention to a quack whose unblushing pretensions have exceeded any thing yet on record! It is astonishing to find that this ignorant pretender is peculiarly fostered and patronized by the ARISTOCRACY of this country, and by people whose education and rank might indicate some portion of reason and common sense. But more of this anon.

XXXVIII.

REMARKABLE CASE OF TUBERCULAR EXCAVATION COMMUNICATING WITH THE EXTERNAL AIR THROUGH AN APERTURE BETWEEN THE RIBS.

Mr. MACLIN, æt. 47.—His symptoms at present, July 25, 1830, are frequent, small, troublesome cough—expectoration of yellow, puriform sputa, occasionally tinged with blood, and rather abundant—pain at times in right side of chest and shoulder—decubitus on *left* side only, with head rather high—aspect phthisical—disposition to perspire at nights—pulse feeble—appetite good.

Chest narrow, contracted—on deep inspiration *left* side only expands—right shoulder droops. Immediately below the right sterno-clavicular articulation, but rather nearer the shoulder, the integuments for a space of two inches, or rather more, in diameter, are reddish and very thin. On coughing or expiration, they swell out into a tumour nearly as large as a goose egg, which almost seems ready to burst. The integuments are drawn inward on inspiration. Great part of the sternal end of first rib, and right side of upper bone of sternum between first and second rib are absorbed, and the space between the first and second rib is consequently enlarged from above downwards. The integuments here and the neighbouring bones are very tender on pressure.

Percussion and Auscultation. Whole of *left* thorax sounding tolerably sonorous. Respiration in this side unequal, but generally puerile—no râle, nor pectoriloquy.

Lower part of *right* thorax anteriorly, and right back dull upon percussion. The respiration in this side imperfect every where, but especially so below, although almost cavernous above; no pectoriloquy heard, but gargouillement on coughing, at the apex of the lung.

History. Three years ago was in good health, but suffered from a cough the preceding Winter. In October 1827, his wife died of confirmed phthisis, which had lasted for two years. In the succeeding February, he caught a cold, for which he treated himself at first, but without success. Mr. Cosgreave was called in and prescribed for him. Cough, with more or less expectoration remained, and in the Winter of 1827-8 he went to Madeira, where he gained flesh surprisingly, but never lost his cough. In the Spring of 1828 he returned, and from that time till a month or so ago he still continued to suffer from the cough and expectoration, with occasional pain in the side, and emaciation. Three weeks or a month ago emphysema of the right side of the neck, and parts contiguous to the tumour, took place; it subsided in a few days. After the subsidence of the emphysema, the tumour below the right clavicle was discovered by Dr. Johnson. Within the last three weeks the integuments have grown thinner.

Plaster and roller to defend the thin integuments from bursting—sedatives—moderately good diet.

26th. Awoke last night and found that the integuments had given way, without any particular exertion of which he was aware. Suffers little aggravation of the symptoms in consequence. Discharges air through the aperture at each expiration.

Light compress.

August 1st. A considerable quantity of purulent discharge issues from the wound on coughing—expectorates by the mouth little else than glairy mucus (probably from bronchi and other lung)—feels inconvenience if the dressings obstruct in any way the egress of matters from the wound—cough troublesome.

Pul of Morph. Acet. and Conium, ter die—ale, meat, &c.

Monday, 9th. We examined the patient. The expectoration by coughing, from the aperture between the ribs, was very considerable, and attended with a loud discharge of wind, so much resembling a common cough, that it was difficult to say whether the noise was made by the mouth or the intercostal aperture. Very little expectoration now comes from the mouth, except when in the horizontal position, when a small proportion is discharged in the common way. The cough is still more troublesome than before the new opening took place—he wastes in flesh—and the total discharge is increased. He has, however, no fever; and he sleeps a little by the aid of Battley's sedative. He takes sulphate of quinine in acidulated infusion of roses.

22d. The patient has daily lost ground; and there has lately come on a colliquative diarrhoea, which opiates and absorbents cannot check. The expectoration from the external wound continues profuse, and the rush of air, at each expiration, and especially, when coughing, is considerably greater than that which is emitted by the trachea and larynx. The constant discharge from the wound now renders his life a burthen to him, and death is become acceptable. On the 24th of August, he expired. The body was examined by Dr. Dill and Dr. Johnson. The following is Dr. Dill's report.

INSPECTION. The body was much emaciated—the skin covering the sternal ends of the second and third ribs of the right side was ulcerated, and a fistulous opening, which communicated with the right thoracic cavity, was formed in the intercostal space between them. On removing the sternum and cartilaginous portion of the ribs, it was found that this fistulous aperture terminated in an immense cavern within the right lung, which was capable of containing at least one pint and a half. This cavity was lined with a tolerably dense membrane, which adhered both anteriorly and behind to the ribs, and, although in some parts there intervened between this sac and the costal pleura a small quantity of pulmonary parenchyma, which had not been as yet destroyed, in general no remains of lung could be perceived be-

yond the sac, which was in immediate union with the pleura which lined the chest. The destructive process, which had formed this enormous cavity within the substance of the lung, had extended anteriorly through a portion of the sac and costal pleura to the ribs, the sternal ends of the first two of which it had rendered carious, and the third and fourth were so far diseased as to break with ease when but slightly pressed upon. Across the lower half of this tubercular cavern ran, in an oblique direction, a small shred of lung, which appeared to consist principally of the pleura, which had lined the sulcus between the superior and middle lobes; and towards the left side of the floor a fistulous opening was discovered, which admitted the extremity of the little finger. By slitting down the division of the trachea which is devoted to the right lung, the third branch which this tube subdivides into, was found to terminate in this opening; and in its immediate neighborhood was seated another aperture, which was likewise the termination of another branch. It was principally through these openings that the matter, which was expectorated by the mouth, made its way into the trachea, and these free outlets, aided by the external aperture upon the surface of the chest, had furnished such a ready exit to the contents of the cavity that, although almost all the upper and middle lobes were destroyed, there was scarcely any tubercular fluid in the sac. The lower lobe was also extensively diseased and contained several smaller cavities, which freely communicated with that now described. One of these cavities, large enough to contain a pigeon's egg, in place of being ragged, uneven, and suppurating like the rest, was lined with a fine, smooth, mucous membrane. This cavity had been obviously the seat of previous disease, which Nature had arrested by forming this artificial membrane; but as the remainder of the lung—even that in the immediate neighbourhood of this healed vonica—was irremediably disorganized, this sanative effort could have given but a trifling, if any check to the progress of the symptoms. The right lung was in a tolerably healthy state, having only a few hard tubercles imbedded

in its upper lobe, and the heart exhibited no manifestation of disease.*

XXXIX.

MR. DOBSON ON THE STRUCTURE AND FUNCTION OF THE SPLEEN.

We had hardly printed our remarks on Sir Anthony Carlisle's speculations on the spleen and thyroid gland, when another pamphlet on the same subject was laid on our table. Mr. Dobson went to work in his investigation by a series of experiments on animals—a mode of procedure which is far from unobjectionable; but which, at all events, is superior to the closet speculations of Sir Anthony. If they are retracted with cruelty towards dogs, they are free from spleen towards man.

Mr. D's first object of inquiry was to ascertain the changes produced on the spleen by the digestive process, and the exact period, after ingestion, at which such changes take place. We need not detail the experiments, but only their results. From these it appears, that, till the expiration of three hours after a full meal, the dog's spleen does not present any visible alteration. At the end of four hours it is much enlarged—and in five hours, it attains its maximum, after which it gradually decreases in bulk for 12 hours.

In the next train of experiments, Mr. Dobson removed the spleens of dogs.

"Exp. I. The spleen of a dog was removed; the animal apparently suffered little from the operation. On the following day I gave it a quantity of food; it ate vo-

* The immense magnitude of the excavation in this case, and the quantity of matter which it must have always contained before it burst externally, occasioned the absence of pectoriloquy. Those acquainted with auscultation will perceive that the indications supplied by percussion and auscultation were remarkably correct. The case is on the whole, a rare and curious one. The patient was under the care of the editor, but other avocations prevented his attending with regularity and minuteness to the symptoms, which will account for the concise and abbreviated form of the notes.

raciously; for three hours after no perceptible alteration was produced; but in *four hours after*, indications of uneasiness were shown; the animal became restless, and lastly sunk into a nearly torpid state; it was often moaning, the pupils were dilated,—the heart labouring; there was frequent micturition; the respiration was exceedingly laborious, and, in short, there was every mark of plethora, or overfulness of the vascular system. In the course of two hours from this period, the animal began to recover; and in about three hours these symptoms had subsided, considerable languor remained. The animal took a large meal twice or thrice in twenty-four hours, and after each, precisely similar effects were presented. The animal became more feeble daily,—in a month after the operation, it died.

EXP. II. I next removed the spleen from another dog, but instead of giving full meals, as in the last experiment, I gave a small quantity of food every hour, or every two hours. The animal ate voraciously; no unpleasant symptoms occurred,—this plan was pursued for three weeks, when the animal to all appearance was quite well; in fact, it became fat; the ligature upon the splenic artery had come away, and the abdomen healed. I then commenced giving full meals twice in twenty fours, the same train of symptoms followed each meal, and at the same period, as in the last experiment, though perhaps not so urgent: the animal died in a month from the commencement of this plan of feeding.

In both dogs I observed that the intestinal evacuations were of a *lighter* colour than natural. On examining the body of each after death, a small quantity of limpid serum was contained in the bag of the Tunica Arachnoides, and more than a natural quantity in the lateral ventricles; the veins of the brain were in a highly congested state; the abdominal viscera presented no unnatural appearances, but the portal systems of veins was much gorged with blood."

It may be stated that, generally speaking, the dog finishes its first digestion in three or three hours and a half—and, consequently, the turgidity of the spleen appears to com-

mence when the stomach is emptying itself into the duodenum. The following is the deduction which Mr. D. draws from his first series of experiments, viz.

"That the spleen acts as a reservoir for containing the additional quantity of blood which the vascular system has received, by means of the nutritive process. It is evident from the remarks on chyliification there is a greater quantity of blood in the system at five hours after a meal than at any other period; and as we have premised, that the blood-vessels are not capable of containing this increase with impunity, I infer, that the spleen serves as a reservoir to hold this surplus, because, at the time the chyliactive process is at an end, the spleen is found distended with blood. Then, as detailed in the third experiment, at twelve hours after a meal, the spleen was small, and contained very little blood: the reason of this phenomenon is obvious; at five hours after a meal, the nutritive process is nearly completed; at five hours after a meal, the spleen arrives at its maximum size: now, as secretion goes on in the various emunctories, there must consequently be a reduction of the circulating mass, and to compensate for this, blood is simultaneously expelled from the spleen, so that in twelve hours the whole is removed; no more circulating through that organ than is necessary for its support."

It was seen that when the spleen was removed, and the dog kept on full meals of animal food, he died: but when kept on abstemious fare, he went on very well. Mr. D. infers from this, that *"the circulatory vessels are capable of containing only a certain quantity of blood with impunity, and that when an increase in the volume is produced, as after digestion, the spleen performs the office of a reservoir to receive the surplus; they show also, that when the fluid contained in the vessels becomes reduced in quantity, as from bleeding, the spleen affords a supply, so as to enable the various organs to perform their necessary offices: and further, they afford collateral evidence of the spleen being more elastic than the blood-vessels."* Mr. D. conceives that when we drink a bottle or two of wine, or large quantities of malt-liquor, the spleen performs the office of

reservoir for the time. He had twice an opportunity of examining the spleens of great ale-bibbers, and found them very much enlarged—in one case, so enormously so, as to give the idea of “a bladder half filled with oil.”

The pathology of the spleen has afforded no direct indication of its function. When the liver is diseased, the function of that viscus generally shews the existence of the malady—but, in reference to the spleen, we have no such tangible data afforded as a clue. The enlargement of the spleen, after protracted agues and remittent fevers, may be explained by the congestion of blood in this, and indeed in some other organs, during the cold stages of these diseases. The practical inferences drawn by our author are the following.

“I. That the quantity of fluid usually taken into the system at one time, is greater than the apparatus is capable of containing with impunity; and, in consequence of this, excited vascular action, with all its train of morbid consequences, is a common effect.

II. That in disorders affecting the spleen, as in Intermittent Fever, and as well of the whole vascular system, the practice of giving large quantities of fluid, is not only unphilosophical, but decidedly injurious.”

We have thus laid before our readers the substance of Mr. Dobson's pamphlet, and shall observe that the theory proposed, and the data on which this theory is based, are much more entitled to respect than those of Sir Anthony Carlisle, notwithstanding the “ENLARGED INTELLECT” which he modestly claims for himself and a few of his own rank.

XL.

ADDRESS.

Transcribed from the Book of Laws and Regulations of “the Metropolitan Society of General Practitioners in Medicine, &c. &c.”

“Concordia Res Parvæ Crescunt”

An association has been established in London, denominated “*The Metropolitan Society of General Practitioners in Medicine and Surgery throughout England and Wales,*” the nature of which is developed by this, its

first code of laws, whilst its more general intentions and objects are briefly explained in the following statement.

Medical Men, in this country, whose services are dedicated to the practice of their profession through all its extensive ramifications of Medicine, Surgery, Pharmacy and midwifery, have been aptly denominated “*General Practitioners.*” The epithet, as distinguished from the appellations which designate those individuals who devote themselves to one branch only of the healing art, is as honourable as it is descriptive; inasmuch as it denotes the possession of qualifications adequate to all the emergencies of an arduous profession. It has, however, been said, that, in its relation with the titles of “Physician,” and “Surgeon,” the term “General Practitioner” implies a *Subordinate* in the social and intellectual ranks of the republic of medicine; but such an inference is at variance with the spirit of the designation, and presents a forced acceptation of its sense, to which no individual of the class will subscribe. It will hereafter be the duty of the Association now established under the denomination of “*The Metropolitan Society of General Practitioners,*” to discuss the subject; and, after due examination and deliberation, to confirm this or adopt another cognomen. It will, also, be the province of the Society, to institute an inquiry into the expediency of equalizing the right to professional distinctions, and to adopt such policy as shall secure for its Members the civil and literary respect to which their education, attainments, and practice entitle them.

The position in society occupied by General Practitioners, is one that demands their serious attention. Perplexed by multifarious duties—threatened by extensive responsibilities—oppressed by physical exertions—disturbed by conflicting interests—assailed by jealousies—harassed by intrigue and envy—injured by corporate privileges—insulted by legal enactments, and degraded by an opprobrious mode of remuneration—the General Practitioner has more extensive evils to cope with, than he can hope to combat successfully by the unassisted force of his own mental and physical exertions. It is,

therefore, a subject of astonishment, that the members of a class, around whose banner more than ten thousand individuals are spread over the cities and provinces of England and Wales, have not sooner coalesced, and formed themselves into a deliberative body with executive authority and means, in order to render the knowledge, experience, and resources of the entire mass, available to every Member of the Association, who might seek or require its advice and support. By such an union, a concentration of the opinions, experience, talents, and influence of the whole class would be consummated, and its application directed upon all occasions, to the necessities and emergencies of any individual ; or to the promotion of the collective interest of the whole body. In aid of a co-operative system like this, the support derived from a pecuniary fund is not to be overlooked ; in fact, it is an indispensable requisite for carrying into effect any political or legal undertaking—for defending individual interest—and for supporting a domiciliary establishment, which, to ensure success to the scheme, should offer, not merely a place for the conduct of business, but the conveniences for agreeable social intercourse.

Upon the foregoing principles has the Society of General Practitioners been begun ; its prosecution may be understood by the following details

In the selection of a House for the Society's use, the Committee have been influenced by a prudent regard to economy, and a desire to restrict the extent of the Chambers to the actual necessities of the Association. The Committee did not consider it justifiable in the onset, to open an establishment upon a large scale ; purposing to extend it, whenever an increase of the Society's numbers renders it necessary, or the Members themselves may call for further accommodation. Such refreshments as can be prepared under the present circumscribed fitness of the premises, are served (at a moderate charge) at any time during the day, by the persons in attendance. It is in contemplation, however, to provide dinners and other refection, as soon as the magnitude of the Society will warrant the

adoption of a plan for combining the comforts and conveniences of a social club, with the more solid advantages to be derived from the Institution. The Reading Room is open from ten o'clock in the morning till ten at night ; and the Daily Newspapers, periodical journals, &c. regularly laid on the table. Notwithstanding the Library offers at this time a limited allurement, the Society has cause for congratulation in the prompt and handsome manner in which many eminent individuals, not belonging to the Association, have presented their works. The Members of the Society, also, have not been tardy in offering their respective donation of books. The Library will be opened as soon as the necessary arrangements are completed.

The Committee have great pleasure in announcing, that the Treasurer's statement of the Society's affairs, shows *a balance of cash in hand* ; and they take this opportunity of giving a pledge to its Members and to the profession at large, that they will, on no account, incur any liabilities beyond the actual resources of their funds.

The pleasure and advantages to be derived by the Metropolitan Surgeons, from the social and friendly intercourse established and confirmed through the medium of their Chambers, are too apparent to need any comment : to the *country* Members, also, they present a most convenient place of resort during their occasional sojourn in London, where they may meet their professional friends, mix with their unknown contemporaries, and, at leisure, contemplate the men, books, customs, manners, opinions and feelings, of the medical microcosm of the Metropolis. The Associates, likewise, join in these literary and social meetings ; forming and cementing those professional ties and private friendships which ought to subsist between all the members of a liberal profession. To the student in Medicine also, the Society's Chambers afford peculiar advantages. He is supplied with books either of reference or general instruction ; he has the accommodation of a comfortable room for meeting his friends, for his moments of leisure and relaxation or literary studies ; and lastly, in addition to the mental and sci-

entific improvement which he derives from attending the discussions of the Society, he associates daily with his seniors in the profession, from whose conversation and communications he receives both pleasure and instruction.

The amount of the annual contribution, in comparison with the advantages to be derived from it, has been fixed at a very moderate sum; the Committee feeling assured that the numbers of the Society will be equal, even at this small ratio, to the production of a fund amply sufficient for all the purposes required. The first care of the Society is the conservation of its own integrity, and the general interests of its Members. Medical politics have decidedly taken a bias, unfavourable to the General Practitioner, and he stands, not only unprotected in his professional character by the fostering hand of a generous government, but legislative enactments have actually been passed, which oppress and degrade him; his privileges are trampled down by the assumptions of unjust, self-created, arbitrary power; and the defence of his rights confounded by the hazardous jurisprudence of legal misinterpretation. These great and crying evils can only be redressed by parliamentary influence; and the chief strength of the fund arising from the contributions of the Members of this Society, lies in the power which it gives, of appealing to the legislature, and of persisting steadily against oppression and opposition, until the General Practitioner shall have obtained a distinct and legal recognition of his rights, privileges, and ranks, and have burst every trammel that binds him down to a degraded subserviency. These are measures which the Society is pledged to pursue; the period of their commencement must, of course, depend upon the possession of means, and be fixed by the *fiat* of deliberation. For the purposes of individual protection, the fund will at all times be available in every instance where, upon due inquiry and examination, it shall appear to the Society, that one of its Members sustains any injury or wrong in his professional capacity; or is called on to assert his right or defend his interest on any point that applies strictly and especially

to the whole body. The subject of professional remuneration is of momentous urgency, and demands the most careful consideration. It is true, that, under the direction of the Lord-Chief-Justice Tenterden, a verdict was lately given in favour of the right of a General Practitioner to charge for his services; but such a decision by no means necessarily becomes a law of the land, and though dictated by the opinion of one judge to-day, it may be reversed by the *dictum* of another to-morrow. When the Society shall have arranged a scheme for regulating a general mode of professional compensation, by which the Medical Practitioner may be emancipated from the odious necessity of balancing his remuneration by the charge for his medicines, it will be necessary to legalize the measure by an application to Parliament. In fine, the fund formed by the annual contributions, will enable the Society to prosecute measures for obtaining such legislative interference as may be necessary in removing all disabilities; for the protection and support of the interests and welfare of its Members; for bringing into operation those suggestions which the fluctuating influence of circumstances may give rise to; and for establishing the respectability and prosperity of the General Practitioners of this kingdom.

The plan of the benevolent fund differs from any other heretofore established; * being founded upon the principle of *general* benevolence. To the Members of this Society, whose circumstances preclude them from providing for the contingencies of accident, disease, old age, and death, it must surely be a consolation to contemplate a resource for such periods of desolation; whilst the more favoured individuals whom fortune has placed above the necessity for such aid, will not withhold their support to the efforts of humanity. It is, therefore, confidently trusted, that the voluntary donations of all classes of persons, will not fail to produce a fund adequate to the benevolent intentions of its philanthropic contributors; in aid of

* Extending relief to Medical men who do not belong to the Society, and are not subscribers to any fund.

which the *surplus of the general fund* will be added to it, as often as it exceeds the sum necessary for the exigencies of the Society.

To promote the objects contemplated by the founders of this Society, its Members, wherever situated, are invited at all times, to an unreserved communication of their opinions and wishes. By this means a splendid system of general co-operation will be established throughout the kingdom, and remedies devised and applied for evils of every sort, whether local or universal, individual or collective. In furtherance of the measures for improving the science of medicine, it is requested that the members will transmit to the Society in London, such papers, reports of cases, and other professional information, as they may consider conducive to the improvement of knowledge and the good of the public. The more important communications will be printed, as the "*Transactions*" of the Society; and as the literature thus collected, will be regarded as the joint property of the Association, it will be published for the benefit of its Members, merely at a remunerating price for the expenses incurred.

Such are the principles and intentions of Society to which all the General Practitioners in the kingdom should attach themselves; and every individual of the class is hereby invoked, by the respect which he bears for himself and the regard he entertains for the honor and interest of his profession, to give his aid in promoting the formation of an institution for establishing the prosperity and happiness of the medical community.

"Ex veritate causa pendetur."

By order of the Committee,

HENRY BOND, Sec.

*Society's Chambers, 4, Regent Street,
August 12, 1830.*

It is requested that all applications and communications be addressed (post paid) to the Secretary. For the mode of admitting Members into this Society, vide Chap. 1, Clause 8, of the Rules and Regulations.

XLI.

ON THE TREATMENT OF ORGANIC DISEASES OF THE HEART. BY BARON LARREY. It is scarcely less distressing to the medical practitioner to witness the slow ravages of

an indomitable organic disease, than for the patient to bear them. The venerable Baron Larrey has dedicated a chapter in his recent work, to the treatment of enlargements of the heart, by means of counter-irritation, especially by moxa, which we deem it necessary to notice in this Journal.

The more, he says, we reflect on organic alterations in the heart, the more we shall be convinced that they, like other changes of structure, result from a morbid irritation going on in the tissues of the heart, and disturbing its functions. Contrary to the opinion of Corvisart, Baron Larrey is of opinion that we cannot remove hypertrophy of the heart by the most rigorous system of depletion—and in this sentiment we coincide. Counter-irritation, however, promises more advantages, and the Baron assures us that, for more than thirty years past, he has ascertained the beneficial effects of this counter-irritation on a large scale. The Baron has a theory in his head that the primary and essential cause of these organic diseases consists in the presence of "a morbid principle, whether syphilitic, scrofulous, herpetic, or otherwise, which fixes itself on the dense tissues of the heart and arteries." This doctrine, especially when taken in connexion with the remedy, bears some analogy to that of St. John Long—but the veteran Frenchman does not attempt to extract money from the pockets and quicksilver from the brains of his patients! He fairly states the mode and means of counter-irritation—and is respected by his professional brethren—while the English charlatan applies AQUA FORTIS to the backs of his patients with as much *sang froid* as he formerly applied oil or varnish to the canvass of his paintings!

Baron Larrey thinks that the position of body necessitated by certain trades and professions,—the compression of the chest and abdomen by certain articles of dress—the violent exertion of the voice by singers, &c.—long-continued grief—onanism, and other causes are very efficient in the production of cardiac and arterial aneurisms. We shall not enter into the consideration of the symptoms and diagnosis of enlargements of the heart, whether active or passive, since

we are constantly referring to such subjects. In respect to the treatment, Baron L. observes that all kinds of depletion have been recommended by authors, for the active hypertrophy; while the passive dilatation has been treated by diuretics and other remedies that, in his experience, have done more harm than good.

The Baron, therefore, lays down two indications to pursue, whether the enlargement be active or passive: first, to counteract or destroy the primary specific cause (as syphilis, scrofula, &c.) if it can be recognized, by specific remedies—the second indication is to draw off irritation from the interior to exterior. Whether the primary cause be syphilitic, scrofulous, rheumatic, or herpetic, the Baron avers that the mercurial treatment is almost always beneficial, especially when combined with proper auxiliaries and counter-irritation. In the active hypertrophy, he uses local depletion as one of the auxiliaries—and after this remedy has been employed, he has recourse to the moxa, as the best method of producing counter-irritation. Cold, in the form of ice, is another favourite remedy of the Baron. It should be applied to the region of the heart. Next he commences the application of moxas in the track of the intercostal nerves behind the left hypochondrium, and gradually coming forward to the cardiac region anteriorly. The moxas here produced the best effects. A favourite prescription of the Baron's we shall here introduce.

R. Oxymur. Hydrag.
Muriatis Ammoniac,
Opii, aa. gr. v.
Aquæ destillat. ℞j.
Misce ft. solutio.

A dessert spoonful of this solution is the dose prescribed, but whether oftener than once a day is not mentioned. The diet, of course, in active aneurism of the heart, is recommended to be very sparing. Moral and physical quietude is necessary; but, alas! how seldom can these be obtained! The Baron next proceeds to a detail of cases: as these are authentic facts, we shall make no apology for giving a succinct account of them.

Case 1. This was a young woman, 26 years of age, who presented the usual symptoms of hypertrophy of the heart. This organ beat over a large space—the impulsion was considerable—she could not bear pressure on the cardiac region—the pulse was hard and concentrated—she had great pain in the loins and region of the heart—jugular veins distended—lips violet—breathing difficult—aphonia complete. These symptoms had come on after a bad labour, succeeded by great uterine discharge (leucorrhœa) which was suddenly suppressed by saturnine injections, immediately after which, the cardiac affection supervened. These phenomena led Baron Larrey to conclude that *passive aneurism* of the heart existed—though we cannot see clearly the data on which the venerable author founded his assumption.

The oxymuriate solution, before alluded to, was prescribed for this patient, and cupping-glasses were successively applied to the loins and lumbar region generally, after which the moxa was used to various parts of the back, and round along the ribs to the region of the heart. The most rigorous regimen was enjoined, and the counter-irritation was long continued. The Baron confided his patient to the care of a pupil and went off on the Russian campaign. On his return, in 1815, he was agreeably surprised by a visit, at the "HÔPITAL DE LA GARDE," from the patient (who was a washerwoman) in perfect health, and quite embonpoint.

With all due veneration for the experienced Baron, we doubt the existence of either passive or active dilatation of the heart in the above case. We have seen so many instances of inordinate action of the heart in females, after, or during uterine discharges, imitating organic disease, and deceiving ourselves and many of our professional brethren, that we have long ago learnt to distrust the common symptoms, and even auscultation in such cases. We strongly suspect that the foregoing case was one of these; but we are far from denying that the remedies were advantageous.

CASE 2. A female, aged 27 years, had complained for about a year, of pain and

violent palpitation in the region of the heart—symptoms which she attributed (and probably with some truth) to profound distress of mind which she had experienced, together with the sudden suppression of a fluor albus, to which she had been subject for many years. The Baron recognized “*all the signs of passive aneurism of the second degree of intensity.*” “Des battemens précipités, occupant un grand espace, se faisaient sentir sous les fausses côtes du côté droit, à l’épigastre, comme à tout le côté gauche de la poitrine.” These palpitations (says Baron Larrey) were accompanied by pains in the back, cephalalgia, dry cough, dyspnoea, greenish expectoration, &c.* On placing the hand on the left side of the chest, it was strongly elevated by each pulsation of the ventricles, and conveyed a sense of heat to the observer. The patient was deprived of sleep, and was excessively depressed in mind. The treatment was commenced by a large bleeding from the jugular, after which cupping-glasses were applied to the loins. To these succeeded the moxas, two at a time, behind the left hypochondrium. The amelioration which the patient speedily experienced, encouraged her to persevere for the space of 15 or 16 months, during which 19 applications of the moxa were made. Ice was applied to the præcordial region for the first month, and the mercurial solution before mentioned was taken internally, with cooling and abstemious diet. Under this plan, all the symptoms of cardiac aneurism disappeared, and the heart regained its regular and natural action.

CASE 3. Jean Baptiste, a lieutenant in the fifth regiment of guards, aged 39 years, and of robust constitution, had made a great number of campaigns in various parts of Europe. He was suddenly seized, towards the close of the year 1824, with acute

pain in the region of the heart, accompanied by audible palpitation, cephalalgia, vertigo, and occasional syncope, especially when exerting himself in military manœuvres. He also complained of a sense of oppression and much heat in the left side of the chest. He informed Baron Larrey that he had felt more or less of these symptoms ever since a third attack of syphilis, in which nodes on the shins and other constitutional symptoms had shewn themselves. He had several times had gonorrhœa, which was treated by astringent injections. He entered the hospital in the beginning of August, 1825; and, on examination, the heart was pronounced to be in a state of active aneurism or hypertrophy. The left side of the chest was considerably larger than the right, and the ribs were separated more than on the opposite side. The pulsation of the heart was obscure, but accompanied by bruit—pulse full, hard, and vibrating, 100 in the minute. The left side of the thorax was hotter than the other—voice hoarse—great irritability, amounting to irascibility.

The jugular vein was opened—and, a few days afterwards, venesection was performed in the arm. Cupping-glasses were also applied to the back and loins, with scarification. A seton was inserted in the left side of the chest, and when suppuration was established, the moxas were commenced. The first two were applied under the left scapula, near the spine; and others were successively applied to the same place, as well as to the epigastrium. Thirteen applications were made in all. The actual cautery, in a gentle degree, was also employed a few times. The antisyphilitic solution was, of course, administered internally, with abstemious diet.

Ice was applied to the region of the heart, but he could not bear it. By perseverance during the space of eight months on this plan, the aneurismal symptoms disappeared—the left side of the chest was reduced *below* the size of the other. In short, he perfectly recovered his health, and was examined many times by physicians of eminence since his departure from the hospital.

* It is astonishing to see such palpable inconsistencies as we often observe in the statements of the most eminent French practitioners. In the very same line of the same sentence, Baron Larrey asserts that the cough was *dry*, and accompanied by a *greenish expectoration*!

Remarks. We suspect that, in this case, there was chronic inflammation of the pleura, with more or less effusion into the left side of the chest. The inflammation may also have affected the pericardium. We can in no other way account for the enlargement of the left side of the thorax first, and its ultimately becoming smaller than the other. The treatment, however, was good, whatever name we give the disease.

Case 4. Pierre D. a Swiss valet, presented himself to the Baron with all the symptoms of passive aneurism of the heart and incipient phthisis. The pulsations of the heart were inordinate, and over a large space—that side of the chest was of higher temperature than the other. Oppression of breathing, aphonia, habitual cough, with mucous expectoration, deep-seated pains in the loins and in the region of the heart were also present. Palpitation and bruit were heard when the ear was applied to the chest. The treatment was nearly the same as that which has been described in the other cases—namely, by local bleeding to a certain extent of reduction, when the moxas were applied for the space of 15 or 16 months, when a complete cure was effected.

We shall analyze but one other case, and then close this paper.

Case 5. Early in March, 1826, Alexandrine W—, aged 25 years, was brought to Baron Larrey. She was emaciated, pale, eyes hollow, breathing short and laborious, cough dry, with oppression, voice hoarse, mammae wasted, and the nipples covered with an ill-conditioned ulceration. To the right of the centre of the sternum arose a prominence, the size of a small apple, under which were heard the pulsations of the heart, accompanied by a *bruit de soufflet* synchronous with the pulse. When the ear was applied to this part the undulation appeared so close, that Baron Larrey conceived there was an aneurismal dilatation of the aorta, near its curvature, of considerable magnitude. The right carotid artery was much dilated up to its bifurcation. So were the subclavian and axillary of that side. The heart appeared, from auscultation, greatly enlarged, with thickening of the left ventricular parietes in particular.

The least degree of exercise, or the slightest mental excitement brought on violent palpitation, oppression of the breath, and tendency to syncope—generally followed by hæmoptysis, with a pulse from 140 to 150 in the minute. We need not detail the various distressing symptoms which accompanied such a state of things. Suffice it to say, that they were aggravated by the indiscretion of a medical practitioner, who coolly informed this young lady that she laboured under a mortal malady!

When she came under Baron Larrey's care, in company with M. Dumeril, she informed them that, in 1820, she lost her mother, an elder sister, and a brother of aneurism of the heart, accompanied by phthisis pulmonalis. Soon after this series of afflictions, she began to experience the symptoms of her present complaint, in the form of violent palpitations and spittings of blood, with irregularity and even suppression of the menses. She had been bled several times, and was put on the most abstemious diet; by which she was relieved, with the help of assurances that her disease was not so bad as her other physician had predicted. But she relapsed into a state of great suffering, and it was at this epoch she came under the observation of our author. He concluded that an active aneurism of the heart existed in a very high degree, together with an aneurismal dilatation of the arch of the aorta, an enlargement of the innominate, and its two principal branches, the subclavian and carotid. Although no hope of cure was entertained by Larrey and Dumeril, they tried the effects of art. Cupping-glasses were applied in various places, and then the moxas. Ice was put to the region of the heart, and the mercurial solution, in small doses, was exhibited internally. A surprising benefit was experienced by these measures. The aneurismal tumours diminished—and the size of the heart appeared to be greatly lessened. Forty applications of the moxa were made, and the pulsating tumour of the sternum nearly disappeared. This interesting young lady gradually recovered health, and all the functions were restored almost to a state of perfect integrity. For the truth of these assertions, Baron Larrey appeals to the testimo-

ny of M. Dumeril. She became emborboint, and continued in apparently perfect health for several months, when, after many errors of diet, regimen, and exercise, she was seized, in the Spring of 1827, with an inflammatory catarrhal fever, suffocating cough, spitting of blood—but without any return of the aneurismal phenomena. Venesection and other means were employed, but phthisical symptoms set in—purulent expectoration became established—and hectic fever, with diarrhœa, completed the catastrophe.

Dissection. A considerable quantity of air was found in the *right* thoracic cavity, and the lung of that side was compressed to one-half its natural size. It was studded with tubercles, some of which were softened down. The calibre of the arch of the aorta was reduced below its medium size; but the ribs were still elevated at the point where it had been formerly dilated.* The *left* lung was atrophied, especially at its inferior part; but the upper lobe was sound and crepitous. The pericardium was thickened anteriorly—the heart was void of blood—and *smaller than that of a child*. The calibre of the aorta ascendens was less than natural. Its coats were thickened. The same might be said of the principal branches which arose from the aorta. The liver was prodigiously enlarged, and occupied half the right side of the abdomen. It had elevated the false ribs of that side, and also the diaphragm. Its substance was not altered. There was no other disease.

Remarks. There are some parts of the above case so marvellous, that, were we not assured of the worthy author's fidelity, we should suppose them the statements of a Baron Munchausen rather than those of a Baron Larrey.

"L'exubérance (says he) formée par la troisième côte et son cartilage très-aminci présentait en dedans un courbure ou concavité proportionnée à la saillie extérieure, et sous laquelle la crosse de l'aorte paraissait s'être logée, lorsqu'elle était anévrismée, tandis que cette artère, réduite au-dessous

du calibre de son état normal, était éloignée des parois de cette courbure de plus d'un pouce." This reduction of the aneurismal arch, when taken in connexion with the diminished size of the heart, is truly surprising, and, if correct, impresses us with a high opinion of the value of long-continued counter-irritation, in cases of organic disease within the chest. We think these cases deserve the attention of practitioners, when they have to deal with those dreadful enlargements of the heart, now so common in this and in other countries.

XLII.

PROLAPSUS OF THE UVULA.

WE have reason to believe that some cases of sudden death in fevers, and especially in scarlatina anginosa, are occasioned by the introduction of the elongated and relaxed uvula into the rima glottidis, when the patient is asleep, and thus proving immediately fatal. The following remarks of Baron Larrey may not prove useless if borne in mind.

"In certain diseases," says he, "especially in angina, low fevers, and syphilis, the uvula becomes engorged and relaxed to such a degree that it falls on the glottis and keeps up a constant irritation there, sometimes occasioning actual suffocation, if not promptly relieved. In these circumstances all the usual means fail, and nothing but excision of the uvula succeeds. This is best done by seizing the point of the uvula with a pair of forceps, and snipping it off with a pair of scissors. The part should not be cut off too near the base of the uvula. A young Portuguese merchant (M. Teyxera) in the ninth day of an ataxic fever, was seized with angina gangrenosa, the uvula being the first part affected, and projecting into the rima glottidis and threatening instant suffocation. The voice was extinguished, and all deglutition rendered impossible. The Baron was called to him in the middle of the night, and on examining the throat, he found the uvula drawn down into the rima glottidis, to the extent of nearly half an inch by the act of inspiration. It was black, and appeared to drop off and go down into the larynx. He had considerable difficulty in disengaging the part from the cavity into which it had been sucked, and then cut it away. The relief

* This assertion staggers us a little; but as it is positively made, we dare not deny its truth.

was immediate—respiration went on freely—and this young gentleman was snatched from impending asphyxia.” We repeat our conviction, from some instances in our own practice and in that of others, that sudden death sometimes arises from the above cause in fevers and other acute diseases.

XLIII.

M. LARREY ON SOME OF THE DISEASES OF THE TESTIS.*

This veteran, whose experience in the tented field has been great, and whose situation as surgeon in chief to the Military Hospital of the Royal Guard must have enhanced his opportunities for observation, has published in his *Clinique Chirurgicale* some interesting remarks on diseases of the testicle. Perhaps it may be instructive to compare the opinions of the worthy Baron with those of Sir Astley Cooper, on some points of pathology and practice.

1. *Wounds of the Testicle.* M. Larrey has remarked that these are not succeeded by such bad effects, as the nature and sensibility of the organ would have led us to suppose. A Swiss was lately in the Military Hospital, who had received a cut from a very sharp knife through the whole left side of the scrotum. The instrument had divided the tunica vaginalis, and corresponding portion of the testicle. The wound was dressed with mild ointment and compresses dipped in a camphorated wash, and the scrotum suspended; little suppuration took place; and on the twenty-fifth or twenty-sixth day the wound was perfectly healed. The testis appeared smaller and more contracted than its fellow. If the testis is so injured by a projectile as to be denuded of its tunica, or extensively destroyed in its texture, it must of course be removed. If a violent contusion is followed by ecchymosis, leeches, slight compression by dressings dipped in a stimulating lotion, as one of camphor or ammonia, position, diet, and a gentle emetic to prevent the sympathetic affection of the stomach, are the measures employed by M. Larrey with success.

2. *Inflammation of the Testicle.* This may be either from over exertion or sympathetic. The first is rather rare, and is the only one, according to M. Larrey, for which leeches ought to be applied. After these, discutient and sedative lotions with gradual compression effect a cure. The swelling of the organ occasioned by extreme continence and retention of the seminal secretion is characterized by the size of the part, the tensive pain, the rapid dilatation of the spermatic veins, and the great inconvenience experienced in walking. Baths of cold water, even ice, cooling drinks, and the horizontal posture speedily relieve the symptoms. M. Larrey denies that great continence is so injurious as some authors have supposed.

In the sympathetic inflammation of the testis from gonorrhœa, the membranes are affected as well as the gland itself; if left to itself it may terminate in abscess, but rarely in sloughing. Sanguineous evacuations or leeches are, in M. Larrey's opinion, more injurious than beneficial, and seem to give rise to abscess in some, to hydrocele in others. We doubt whether many practitioners on this side of the Channel will agree with the Baron on these points. His practice consists in introducing into the urethra a small elastic bougie, spread thickly with a gummy preparation of opium, and in giving sedative demulcent drinks, with pills of camphor or of nitre and hyoseianus. An embrocation of camphorated oil of camomile is rubbed upon the scrotum, and slight compression applied by means of a flannel suspensory. When resolution is commencing a gentle emetic is prescribed. This mode of proceeding is hardly to be compared with the more energetic one adopted in this country.

When suppuration takes place, which is usually in the epididymis, we should encourage it by fomentations, and open it as early as fluctuation can be felt. The abscess generally heals without difficulty, excepting when the body of the testis is affected; this is usually deeply disorganized and destroyed.

3. *Nervous Affection, or "Irritable Testis"*

* *Clinique Chirurgicale*, Tome III.

M. Larrey has only seen two cases of this kind, one in an officer of the guard, and the other in a young Parisian lawyer. It was characterised by violent pain extending from the cord to the testicle and occurring in variable paroxysms, retraction of the testis during the latter, moroseness and despondency of temper, and loss of sleep. M. Larrey has remarked, as Sir Astley Cooper has done, that depletion is injurious. If the pain attacks the loins, M. L. uses cupping and moxa, and the latter may be applied in the course of the cord. These means succeeded perfectly in the two cases already adverted to.

4. *Wasting of the Testicle.* This has been remarked by Sir Astley Cooper as a consequence of inflammation, and by Mr. Brodie, if we remember right, of indulgence in masturbation. Baron Larrey gives a more detailed account of the several causes of this curious affliction. Sometimes, when the swelling produced by mechanical injury has subsided, the testicle gradually diminishes in size until it completely wastes. In some cases which our author relates in another part of the work, a wound in the back of neck, affecting the cerebellum, has been followed by more or less wasting of these organs. The abuse of venery; the employment of preparations of opium, whether applied externally or injected into the urethra for gonorrhœa; and especially immoderate indulgence in alcoholic liquors containing much narcotic matter, are very active causes of the complaint.

At the end of the first campaign in Egypt, a number of the soldiers of the French army complained of the almost total disappearance of their testicles, without any venereal affection to account for it. They remarked that they began by losing the sensibility of the generative organs, which no longer preserved their vigour or their form, but gradually softened. So slow and insensible was the change, that they usually only discovered the malady when the testicles had nearly disappeared. On examination at this period, they were found near the ring resembling beans, whilst the cord was equally diminished and wasted. When both testicles were affected, the patient was

deprived of his sexual powers and desires; he became melancholic; the voice was altered; and the beard ceased to grow. Nearly fifty soldiers were judged incapable of service on these accounts.

M. Larrey attributes the disease to the extreme heat of the Egyptian climate and the laborious marches through the desert, which softened the texture of the testicle, and occasioned at first a kind of enlargement, succeeded by the wasting in question. M. Larrey also assigns a destructive effect to the use of alcoholic and narcotic substances, but cannot explain very clearly their *modus operandi*. Into the composition of the brandy of the country, made from dates, there enter several plants of the class of solanum, such as the pimento and the berries of the cherry laurel. M. Larrey thinks it probable, that the action which such substances exercise on the nerves of the stomach, is transmitted sympathetically to the testicles, and occasions their absorption. The ancients, it is said, procured the same thing by the application, for a length of time, of the concrete juice of hemlock to the scrotum. These conjectures of the Baron's must be taken for what they are worth, but it is not improbable that the immoderate use of such substances, combined with fatigues in a burning and enervating climate, may exercise a mysterious agency on the glands of the testes.

When the wasting is complete, art possesses no power to renovate the organ. In the earlier stages of the malady, we may, perhaps effect some benefit by withdrawing, as far as possible, its causes, and by employing some vapour-baths, with dry friction on the surface of the body, irritation in the lumbar and sacral regions, tonics, and generous food. Spirituous liquors should be avoided, or, at all events, procured without adulteration. A suspensory ought always to be worn in warm climates, and frequent ablutions of the body with cold vinegar and water, and abstinence from immoderate venery, are necessary as preventive measures. M. Larrey has had several soldiers affected with this complaint under his care in France. It pursued the same course as in Egypt, and the patients confessed that

they had been addicted to immoderate indulgence in venery, and strong adulterated spirituous liquors. In one of these individuals, both testes in a short time almost disappeared. From being originally of a very robust constitution, he lost his beard and manly features, and looks like a woman. A soldier, whilst landing from a vessel in Egypt, received a violent blow upon the back of the neck, after which the testicle wasted to the utmost degree. These facts collected by the Baron are curious and worth perusal.

5. *Hypertrophy of the Testicles.* An excessive growth of the female breast, without any appreciable change of structure, is not a very uncommon circumstance, but we were not previously aware of the existence of such an affection of the testicle. M. Larrey has seen it twice in the Hospital of the Guard. The first patient was 26 years

of age, and both the testicles had acquired considerable volume, without exhibiting any perceptible morbid alteration, or occasioning inconvenience, except from their weight.—The penis was incapable of erection, but the general health was good. Frictions on the scrotum and in the course of the cord with “double Neapolitan ointment,” in small quantities and at long intervals; embrocations of camphorated oil of camomile; uniform compression by a flannel suspensory; slight diaphoretics, combined with bitters, and the horizontal position, reduced the testes in three months to their natural size. In the other case, the testicles were as large as the fist, and, although in excellent health, this patient also had lost the power of erecting the penis. The same treatment as before, continued six months, was perfectly successful.

CLINICAL REVIEW.

XLIV.

WESTMINSTER HOSPITAL.

ULCERATION OF THE TONSILS—DEATH.

SECTIO CADAVERIS.

WILLIAM PEMLETT, æt. 51, admitted April 24th, 1830, under Dr. Roe. Complains of severe cough and great difficulty of swallowing in consequence of a sore throat. He is very much emaciated, his pulse slow and feeble, countenance anxious, and the surface of his body cold. He is a coal-porter, and states that four months ago he caught a severe cold, attended with cough and dyspœa, and two months afterwards he felt his throat affected. Opening medicines were administered, and he used gargles, but he felt himself grow worse. Three weeks ago the disease had advanced so far that it was with the greatest difficulty he could swallow any thing, and he became in consequence much debilitated. His cough has become more frequent lately, and expectoration plentiful. He does not sleep at night, and his appetite is impaired. Immediately on his admission he was ordered the warm bath.

29th. Passed a tolerable night; there is less anxiety of countenance—pulse full and

quick—tongue clean—bowels confined.—
Haust. aperiens st.

R. Pulv. hyd. cum cretâ,
Ipecac. c. ʒā gr. v.
ft. pulv. bis in die sumendus.

R. Decoct. cinchon. ʒj.
Acid. nitr. ℥. x.—ter in die.

C. c. jugulo ad ʒvj.—Arrow-root and milk daily.

30th. Slept well during the night—has less pain in the throat, and not so much difficulty in swallowing—cough less frequent—pulse softer—bowels open.

Moxa applicet. jugulo.

May 1st. Hirudines xij. jugulo et rep. moxa.

May 4th. He slept better last night, and has less difficulty in swallowing—there is also less anxiety of countenance, but he complains much of debility. Pulse is feeble but regular. Tongue clean—bowels confined. Haust. purg. st. et cont. mist.

May 6th. The moxa was reapplied today. He is ordered beef-tea.

8th. He complains that he experiences great pain in swallowing the medicine.—The dose of nitric acid is diminished to ℥. v.

R. Pil. hyd.

Pulv. opii, āā gr. j.—bis in die.

10th. He is evidently worse—the difficulty of swallowing is increased, and his countenance expresses great anxiety. Pulse very feeble, surface of the body cold. A tube was introduced into the œsophagus through the nostrils and four ounces of wine administered; from the great irritation produced by the tube it was obliged to be withdrawn before more could be passed. Two pints of milk boiled up with two ounces of arrow-root, and the same quantity of port wine were thrown up the rectum this morning, and repeated again in the evening.

11th. He appears to have rallied again. He enjoyed a little sleep in the night, and his pulse has gained a little power. Tongue clean—bowels open—countenance less pale and anxious. He has attempted to swallow some beef-tea, and a tube has been passed into the œsophagus, and about half a pint of strong beef-tea introduced.

12th. He swallowed nearly a pint of the arrow-root last night by the natural efforts. He articulates more distinctly, but his pulse is still feeble. He has inhaled the fumes of the factitious linaria twice, and is to repeat it daily.

13th. He is evidently sinking, and is unable to swallow any thing.

14th. He died this afternoon.

16th. *Sec tio Cadaveris.* The body presented a very emaciated appearance. On examining the thorax the lungs were found adherent throughout the surface to the sides. The upper and middle lobes were completely tuberculated, and the inferior approaching to a state of hepatization. In the superior parts the tubercles were in a state of suppuration, and in the left apex there was a small vomica.

The mucons membrane of the bronchiæ and trachea was natural—the bronchial tubes were nearly filled with a muco purulent fluid—the whole interior surface of the larynx presented a granulated surface, which had evidently secreted a quantity of pus. The ligamentous portions of the larynx were much thickened, and the posterior portion enlarged and uneven.

Abdomen healthy.

XLV.

HOPITAL ST. ANTOINE.

I. CASES OF INTERNAL STRANGULATION OF INTESTINES, FOR WHICH AN OPERATION IS PROPOSED *

Case 1. A young woman was admitted into the St. Antoine Hospital on the 28th of February, 1830, with vomiting, pain in the epigastrium and right iliac region, diarrhœa, and symptoms of phthisis pulmonalis.—Leeches were applied to the epigastrium and iliac region with relief, but on the night of the 3d, she was seized again with violent pain in the belly, vomiting, and no stools; the pulse was small, frequent, and regular. A bleeding procured alleviation, but the symptoms returned next day, and were met by active antiphlogistic measures. On the 5th, the pain continued, and the neighbourhood of the umbilicus was tympanitic; incessant vomiting was experienced during the night; and castor oil produced no stools. The vomiting ceased, but there was extreme tenderness in the right iliac region, and the patient expired on the 14th, having experienced for many days the most excruciating sufferings.

Sec tio Cadaveris. On opening the abdomen the small intestines appeared much distended. The omentum had contracted adhesions in the right iliac fossa, and formed a flattened band, adhering towards the middle of the mesentery, and forming an arch beneath which the distended intestine passed twice. The gut, where pressed on by the band, exhibited a depression, but not of sufficient depth to prevent fecal matters from travelling onwards. Beneath the two convolutions, the ileum, about two feet from the valve, formed two other turns, united to the neighbouring parts, and remarkably contracted opposite the band of the omentum. Had the latter been divided the strangulation would have ceased. Above this part the intestines were distended, below they were shrunk and empty. At the point of constriction the intestine was livid but not gangrenous; the peritoneum was somewhat injected and shewed recent lymph; the lungs were filled with tubercles.

Case 2. Pierre Foyer, ætatis 24, brass-

* Journ. Hebdomad. No. 95.

founder, was admitted on the 20th October, 1829, having suffered for some time from the colic of his trade. For three days it had been particularly severe, with tension of the belly, nausea, and constipation; the pulse was quiet, the tongue natural. Some croton oil was given him, but next day the belly was rather more tense and painful, the pulse more frequent; he had vomited twice, and had not had a stool for seven days. Leeches, lavements, warm-baths, and demulcents, were the means resorted to without relief. The pain on the 22d was very severe and increased by pressure; there was tension in the left iliac region and depression in the right, and the fever was augmented. Bleeding and leeches were employed with no benefit. The umbilicus and especially the left iliac region became prominent and tense, the patient could only recline on the right side or with the body bent forwards, and the aspect betrayed extreme anxiety. Bleeding procured a temporary respite from pain, and so did leeches, but he sunk at one o'clock next morning.

Section Cadaveris. The small intestines were much inflated with air, and united together by soft lymph. The stomach was dragged to the left, and so were the cæcum and ascending colon, which was placed beside the descending, throughout the whole of its length; the right half of the transverse portion was consequently doubled on the left, which had been the cause of the displacement of the stomach. From the right edge of the liver, behind the gall bladder, a band passed across the intestines, dividing the abdomen into a superior and inferior portion, and directing its course to the middle of the left iliac fossa. Here the intestine was enormously distended and formed a sort of tumour round which the band gave two turns, and finally terminated by continuity with the mesentery. Out of the noose thus formed the intestine could not be withdrawn, in consequence of its distention, but when evacuated of upwards of two pints of fluid and air, the reduction was effected. The intestine implicated was the ileum, part of the ileo-cæcal valve, and the ascending part of the colon towards its transverse arch. The gut being withdrawn, the band was then much longer than the

breadth of the abdominal cavity. The intestines were a little reddened, the strangulated portion was red, ecchymosed, rather livid in some parts, but not affected with gangrene. The omentum was deficient in several points.

The reporter of these cases, M. Bonnet, a clinique interne, labours hard to prove that an operation was not only proper, but practicable, and likely to be successful in the preceding cases. He thinks that the diagnosis of an internal strangulation is easy; we believe that it is occasionally not difficult. But the question, *where* that strangulation is, demands a little more consideration; for it is not to be tolerated that we should cut into a patient's belly, to look for bridles and bands of lymph, which possibly may not exist, or, if present, may be inaccessible to the surgeon's knife. M. Bonnet, indeed, affirms that in the preceding cases it was neither difficult to pronounce on internal strangulation, to determine its situation, nor to have performed an operation for its relief. Of the two latter propositions we entertain very serious doubts, and although the issue precludes the decision of the point, yet we think the medical attendants did wisely in not imbruing their hands in blood. We do not affirm that the operation can never be proper, or that circumstances may not arise to point out the nature of the case, and the part producing the strangulation, in such a manner as to render the interference of the surgeon desirable. But we are quite sure that such beacons do not light us on our way in the great majority of these cases.

II. CARBUNCLE—GANGRENE OF THE STOMACH—REMARKS.

Charles Clubot was admitted on the 28th of May, 1829, with a carbuncle on the left side of the neck. That side of the neck and the neighbouring parts were much swollen, with serum and air effused into the cellular membrane—the integuments were livid—and in the site of the carbuncle was an ulcer discharging thin yellowish fluid, produced by the patient's having scratched the part. There was a good deal of debility—the belly was slightly tender on pressure—there was some cough, with uncesi-

ness in the left side of the chest—pains in the limbs—and extreme dejection. He had found lumps coming in his neck about a month before his admission, but the urgent symptoms only dated from the 23d. The ulcerated carbuncle was cauterized with the hot iron by M. Bonnet, and support with stimuli exhibited. On the 30th, the uneasiness in the chest was increased, and he complained of pain in the abdomen, augmented by pressure, whilst only wine was retained upon the stomach. In the night of the 31st he expired.

Sectio Cadaveris, 28 hor. post mortem.

The right lung was gorged with blood. On opening the abdominal cavity, about a pint of sero-purulent fluid escaped, and recent lymph was attached to the convex surface of the stomach. The veins of the exterior of the latter, and of the omentum, were filled with blood, and the size of the stomach was nearly quadrupled. It contained little fluid when opened, but it was an inch and a half in thickness in parts, and several dark oval spots were seen on its mucous membrane. The circumference of these spots was of yellow colour, and in some of them the mucous membrane still existed, although softened, and in appearance putrid; there was no gangrenous odour. The mucous membrane was separated from the subjacent cellular tissue by a thick dark fluid. The size of the spots varied, some equalling in dimensions a six-franc piece. Two or three inches from the duodenum the jejunum presented a blackish spot, where the mucous membrane was a little softened, and a little farther on a prominence was formed by the subjacent cellular membrane being thickened and containing what was taken for blood. About the middle of the neck blood was extravasated into the cellular membrane, between the fibres of the muscles; there was a general disposition to fluidity and darkness in the blood.

Perhaps a doubt may cross the minds of our readers respecting the existence of gangrene of the stomach in this case; at all events the post mortem appearances are not satisfactory. In those who die with sloughing of the cellular membrane, and carbuncle is such, there is always a disposition to fluidity and blackness of the blood, con-

sequently to its remora and collection in the softer tissues, and softening of the latter. These cadaveric changes take place very speedily after death, for we remember in an old man labouring under this affection, one lung was so soft as to appear quite rotten, though no more than 24 hours had elapsed between death and the examination of the body. There is also in these cases of sloughing of the cellular membrane a remarkable disposition to low and latent inflammation of the serous membranes, as the pleura or peritoneum. Thus, in the present instance there was inflammation about the peritoneal covering of the stomach.

In these cases there can be no doubt as to the proper treatment to be adopted. Wherever on pressing the integuments the subjacent cellular membrane feels boggy, or communicates a kind of emphysematous cracking, the integuments being bluish, or of dull yellow colour, with a defined and almost erysipelatous margin, there scarify. Scarify deeply, not merely down to the cellular membrane but through it, and extend the incisions beyond the limits of the affected tissue. The French use the cauterising iron, a clammy, painful, and inefficient remedy, when put in comparison and competition with incisions. At some future time we shall take an opportunity of making some more extensive observations on sloughing of the cellular membrane, a subject to which we have paid some attention, and on which we could communicate some interesting facts.

XLVI.

MONTPELLIER HOSPITAL.

CONSIDERATIONS ON CANCEROUS TUMOURS OF THE JAWS. BY M. DELPECH.*

M. DELPECH, the able Professor of surgery in the hospital of Montpellier, has published some judicious observations on fungous tumours of the jaws, in the *Journal of Medicine* which he conducts.

Mr. Delpech commences by deploring the laxity with which the term polypus has been employed. Belonging, par excellence, to

* *Mémorial des Hôpitaux du Midi*, No. 36.

that vesicular formation which grows from Schneiderian membrane, it has been extended to many other tumours existing in the nasal fosse, the antra, and even the throat. After considering attentively the structure of the common vesicular polypus of the nose, and remarking that the periosteum beneath it is sometimes separated by effusion from the bone, or the latter altered in various ways, our author assumes that the polypus itself may be merely the consequence of this affection of the bone or periosteum. In support of his opinion he instances the fact which most surgeons, we believe, have remarked, that the polypus is more effectually cured, if a portion of the turbinated bone from which it grows is torn away at the same time. The following case is looked upon as a proof, that causes unconnected immediately with the mucous membrane may give rise to vesicular polypus.

Case 1. A robust man, a cook, experienced, at the age of fifty, pain in the frontal region, in the situation of the upper canine tooth on the right side, snuffling through the nose, sneezing, increased secretion from the nose, and frequent hæmorrhage. In the right nasal fossa was a tumour having all the characters of vesicular polypus, which was torn away without bleeding being the consequence. The eye was now observed to be unnaturally prominent, and the bones of the nose to be slightly twisted to the right. In a short time the nasal fossa filled again, the septum was so pushed to the left as to obliterate the cavity on that side, the eye was thrust out completely and vision destroyed, the palatine arch was pushed down, the teeth fell out, and a tumour usurped the place of the right canine fossa. This tumour was at first hard, but soon became soft, fluctuating, and pulsated distinctly. The pulsation extended to the other portions of the tumour in the mouth and nostril, and was even communicated to the eye. On making pressure with the finger the whizzing, so characteristic of aneurism, was felt deeply seated in the tumour. The pulsation ceased on compressing the carotid artery, and reappeared when that pressure was withdrawn. The growth of the tumour

was now become enormous, and the hæmorrhage from the nose was frequent and alarming. In less than a month from this time he died worn out by the fever and irritation.

On dissection an aneurism was found to have sprung from the internal maxillary artery, immediately before the origin of the posterior palatine and sphenopalatine branches. It had destroyed the posterior wall of the antrum which it filled, and had also opened into the orbit.

Mr. Delpech believes that the vesicular polypus was merely a symptom of the pressure exercised on the periosteum and mucous membrane, and of the obstruction offered to the circulation in those textures. He has published a case of a similar kind in the *Révue Médicale*. The tumour was formed by the enlargement of the branches of the internal maxillary, and penetrated into the nasal fossa, the orbit, the mouth, and the substance of the cheek. There was here likewise a vesicular polypus, but the pulsations of the tumour pointing out its nature, M. Delpech tied the common carotid artery, when the polypus disappeared, though the aneurism was not cured. It is curious certainly that a polypus should be combined with the other tumour in both these cases, but we cannot assert with confidence that they were wholly and solely cause and effect.

The malignant tumours which form in the substance of the maxillary bones, and extend into all the neighbouring cavities, are considered as polypi, and distinguished when they project into the throat, by the epithets fibrous and fleshy. We do not believe that the term polypus is so lavishly employed in this country, as it seems to be in France, but perhaps even here it is applied too indiscriminately, to malignant and other tumours about the nose, and contiguous passage. M. Delpech considers it highly important to be aware, that these tumours most frequently have their origin in the neurilema of one of the nerves of the affected part. For proof of this position, he refers to the toothache, with which the disease occasionally commences, when one or more of the teeth falling out or being removed, the fungus fills their place and rapidly extends into the

cavity of the mouth. The next case is offered in support of his opinion.

Case 2. A child, ten years old, was brought to M. Delpech with the left side of the face enormously enlarged by a tumour, which had driven out the upper teeth, augmented the superior maxillary bone to six times its natural size, thrust downwards the palatine arch, filled the nasal fossa, made its way into the orbit, and pushed out the eye. A vesicular polypus existed in the nostril. The disease had commenced with pains in the last molar teeth, which, with the remainder on that side had fallen out, when a medullary tumour from the alveoli forced its way into the mouth. M. Delpech operated by laying bare the maxillary bone and opening into the cavity of the mouth, and then removing the anterior wall of the maxillary sinus and the whole of the alveoli. The disease was found to spring from the posterior wall of the sinus, that part where the vessels and superior-posterior dental nerves pass into the bone. By the fingers, cutting instruments, and the actual cautery, the tumour was followed up with care but determination. It had pierced the anterior wall of the foramina by which the posterior palatine canal communicates with the posterior alveoli, and M. Delpech was obliged to break these up more extensively. The parietes of the cavity in which the tumour was situated were successively touched with the cautery, and the posterior was more particularly attended to. The lips of the wound in the cheek were not united by sutures, in order to attack the disease more readily if it should soon re-appear. At the end of a month this unfortunate, but not unexpected event occurred, and fungous granulations shot up from the posterior wall of the sinus. They were destroyed, but without effect, for the disease returned, and the patient died. On examination of the body, the medullary disease was continued along the sheath of the posterior palatine nerves, and the sphenopalatine ganglion with its filaments as far as the superior maxillary nerve.

This case is well adapted to disprove the idea which some surgeons entertain respecting the powers of the actual cautery. As

M. Delpech well observes, the readers of the works of Dessault form a very erroneous notion of the success attending the treatment of these cases, and hospital surgeons would seem to shrink from publishing the gloomy results of experience. How satirical a sketch might be given of some of the third or fourth rate surgeons in this country. Through the medium of the journals they acquire a smattering of French practice, and continue to embrace opinions which have already been abandoned by the more practical among the French themselves. Their heads are filled with what was done or thought by Monsieur this or Monsieur that, and if they publish a case it is certain to be dressed up in such a mixture of French and English, such a piebald garment of affected minuteness and real want of wholesome knowledge, that the well informed are sickened and disgusted. Thus we scarcely open an English journal, without reading of the benefits derived by some embryo surgeon, from the actual cautery in malignant tumours of the antrum or elsewhere, whilst the French hospital surgeons, who have used it as a staple article since the days of Dessault, acknowledge that the opinions propagated among their countrymen are not founded in fact. We have no wish to discard the actual cautery from practice in these cases; on the contrary, we know it to be occasionally very useful. But we quarrel with the rage of the younger men of the present day to fly blindly to what is foreign, without considering whether the leading men of the nation that they imitate are not amused by the folly and half-informed enthusiasm of the imitators.

Case 3. A man, aged 60, was attacked with pain in the teeth of the upper jaw on the right side, which were extracted or fell out, and a red bleeding fungus sprung from their sockets. There was distortion of the nose and other displacement of parts produced, but the orbit was unaffected. An operation was performed as in the last case, and the parts were destroyed extensively towards the palatine arch and nasal fossa, and in the course of the vessels and posterior dental nerves. The disease did not return.

M. Delpech attributes his success in this instance to directing his attention in a particular manner to the vessels and posterior part of the sinus, and he reprobates the practice of merely destroying all the diseased surfaces indiscriminately. All *should* be destroyed, but the part from which the disease takes its rise, ought to be especially rooted out.

Case 4. A man of good constitution, ætatis 34, experienced violent pain in the upper canine tooth of the right side, and as it became loose, he pulled it out with ease. Hæmorrhage followed, the pain continued, and a red bleeding fungus sprung from the socket into the mouth. Eight months after its commencement he was seen by M. Delpech. The incisor and contiguous molar teeth were loose, the canine fossa was thrown upwards, and the nose was turned a little to the left, but neither the palate, nor the eye, nor the nasal fossa, were affected. By a perpendicular incision from the eye-lid to the lip, and by dissection, the anterior surface of the tumour was exposed. It was covered here only by soft recent bone, which was readily scooped away, and the whole of the tumour exposed. At its upper part it was continuous with a large branch descending from the suborbital nerve, and when this was cut at a sound part a free hæmorrhage ensued. The tumour was removed, and the cautery applied, the edges of the cutaneous wound were brought together, and the patient was perfectly cured.

In other instances appearances are more deceptive, and the operator finds, when engaged in the midst of an operation, that the limits of the disease have far exceeded his expectations. It is in such a case as this that the coolness and self-possession of a really scientific surgeon are pre-eminently conspicuous.

Case 5. A woman, 32 years of age, had experienced, after a confinement, severe pain in the canine and bicuspid teeth of the upper jaw, on the right side. The teeth became loose, and a tumour formed in the canine fossa. She was seen by M. Delpech two years after the commencement of the dis-

ease. The pain was severe, the tumour rose to the lower lid, was unequal and cartilaginous in consistence, but did not appear to be of any considerable dimensions. The operation was performed as in the former case, but on arriving at the tumour, which was of very firm medullary character, it was found to occupy the whole of the maxillary sinus, and to lead to the pterygoid region. The teeth, and as much as possible of the palatine arch were removed, the tumour was followed out and discovered to extend into the infra-orbital canal, and it was torn away from its connexions. On separating its posterior surface from before the eroded pterygoid processes, a large jet of blood took place from the internal maxillary artery or one of its last branches. Compression by the finger was applied till the operation was completed, when the cautery was used, and the cavity stuffed with pieces of sponge. Much irritative fever followed, hæmorrhage occurred on the fifth day, was stopped by compression, and returned, the patient was worn out, but not by the bleeding, and on the 20th day after the operation she died. On examination of the body, inflammation was seen to have extended along the 5th nerve to the pia mater.

Case 6. A young woman experienced pain in the first large molar tooth of the upper jaw on the right side. The gum swelled and the tooth was removed, but the pain continued, and soon a red and painful fungus arose from the socket. M. Delpech augured badly of the nature of the case, and recommended an operation, but the patient felt a natural reluctance, and applied for other advice. From some silly fancy the case was considered syphilitic, and treated by preparations of gold, when *steel* would have been more effectual. The disease rapidly made progress, and in six weeks the tumour was as large as the head of an adult. All the usual melancholy consequences of the increase of the morbid growth were witnessed, and the patient died worn out with hæmorrhage. On examining the head the disease was perceived to have its origin in the neurilema of the nerve of the 5th pair.

The lower jaw is the seat of malignant tumours following the same march as those in the upper. Of this M. Delpech gives only one case.

Case 7. A woman, 37 years of age, enfeebled by frequent child-bearing, was seized with violent pain in the large molar teeth on the right side of the lower jaw. Three fell out spontaneously, and the sockets were filled by a red fungus, covered with a solid cicatrix. The alveoli enlarged, then a point of the cicatrix burst and a fungus sprouted up, the sufferings became intense, and when seen by M. Delpech, the tumour extended from the canine tooth to the coronoid process, was an inch and a half above the level of the teeth, and two inches in breadth. Being satisfied of the malignant nature of the tumour, M. Delpech determined to remove it by operation. Having removed the external bony wall, he arrived at a soft medullary mass, encased in bone. Behind, the tumour extended into another narrow cavity, where it seemed to have a firm attachment. When the morbid growth was removed, it was discovered that at this particular point were situated the dental vessels and the nerve. The latter penetrated the fibrous covering of the tumour, and then, spreading out and becoming more dense, was lost in the medullary mass. The actual cautery was applied to the whole of the exposed surface, and still more carefully to the part where the vessels entered the tumour. All went on well, except at one point before and below the base of the coronoid process, where the patient experienced violent pain, and red, fleshy, and exquisitely sensitive granulations arose. Caustics were tried without much benefit, and the bone which surrounded and concealed the part was broken up. Amongst the fragments thus removed, was the little process which surmounts the inferior dental canal, and the submaxillary nerve being thus shewn to be the seat of the patient's sufferings, it was drawn out by a tenaculum, and divided in a sound part. The tumour twice returned, and each time it grew from a pedicle in the course of the inferior maxillary nerve.

This concludes the series of cases brought

forward by M. Delpech, and we leave it to those surgeons who have carefully dissected many of these tumours, to decide if he is right or wrong in his opinions respecting their origin. If reasoning on such a subject were allowable, we should say, from analogy, that the disease would most probably arise from more points than one, or at least that in different cases, different tissues would give it birth. Before we conclude we may notice one point in M. Delpech's practice, which deserves attention. In the malignant disease, when he expects that parts may require removal at a period subsequent to the primary operation, he does not unite the whole line of the integuments but keeps them apart, in order to get more readily at the deeper parts. When all that is separable is separated, he pares the edges, now cicatrized, of the integuments, and brings them together, as in the hare-lip operation. Perhaps this may afford an useful hint on some occasions. We have given the foregoing cases, much abbreviated, to our readers, in order that they may judge in a fair and general way of the results of operations on fungous tumours of the jaws. They show how seldom success attends the scalpel of the surgeon, in cases of a really formidable description.

XLVII.

HOPITAL DE LA PITE.

OBLITERATION OF THE CAVA INFERIOR.

The proofs of the disease in the following case are not yet verified by dissection; but the case itself is scarcely less interesting on that account.

Case. Lefevre, a porter, aged 40 years, of rather weakly constitution, entered the hospital on the 9th of May, 1830, having been ill fifteen days. Eight months previously,

he had been in LA CHARITE for fracture of the right fibula, during a period of five months, and experienced no constitutional indisposition while there. He was never afterwards able to walk without crutches. For the four months after leaving the hospital, he experienced often a diminution of appetite, chills, &c. and one month before coming to LA PRIZ, he fell down a staircase, and struck the right side of his chest against the wall, which was followed by some pain in that part, and slight cough. Two weeks before he came under the observation of M. Louis, the patient felt pain in the lower and inner side of the right thigh, which gradually extended to the groin, with swelling of the whole limb. There was nothing of the kind in the other extremity till a week afterwards, when it also swelled.

9th May. Both lower extremities are cedematous, but the *left* much more so than the *right*. There was neither redness nor hardness, nor pain along the internal surface of the limbs—immobility, without paralysis, existed in the *left* thigh for two days past. In the groin of that side there were two red bands—and the veins of both hypogastric regions were very much developed those of the thighs not at all apparent. There was no perceptible tumour in the abdomen; but pressure on the lower part could not be borne. There was no fever, though the pulse was 100 in the minute. There was a little embarrassment in the breathing; but the respiration was good, as was the sound on percussion throughout the chest. Venesection ad 3xij. — diluents. — There was a slightly inflammatory crust on the blood. 10th May. He was considerably relieved by the bleeding—the pulse fell to 95—there was less malaise, but a greater elevation of temperature. Some tincture of digitalis and nitre with the ptisans. In the evening a rigor, followed by heat and perspiration. 11th May. Heat natural—pulse 88—left thigh softer—red bands still continue in the groin, but less marked—the abdominal veins more salient. Venesection to ten ounces. The blood was not inflamed. There was another rigor, with

fever and perspiration this day. 12th. The epigastric veins still more enlarged than natural, and the blood evidently circulated in a retrograde direction—that is, from the trunks towards the branches, as ascertained by pressure. There was no particular alteration till the 16th May, except the disappearance of the febrile paroxysms above-mentioned, and the complaint of a pain in the left hypochondrium, and in the lower part of the chest of the same side. The patient coughed and expectorated a little; and on examination, there was no sound in the lower third of the left side of the thorax. From this time till he quitted the hospital, on the 7th of August—that is during three months, the following phenomena were observed. The oedema of the lower extremities progressively diminished, and, by the 6th of June, was scarcely perceptible in the right member, but more marked in the *left*. By the middle of July, there was no swelling in either limb. The state of the veins changed with that of the swelling. On the 26th of May, the right epigastric vein was much more developed than the *left*—by the 6th of June, both veins were considerably diminished. By the 14th, the right was nearly effaced — on the 15th, pressure made on the track of neither vessel caused turgescence. When he left the hospital, no trace of the epigastric veins on either side was visible. Leeches had been applied to the left side of the chest twice, soon after which the cough diminished, but the sound was not clear till the 6th June. On this day, the patient complained of pain in the *right* side of the chest, with an augmentation of the cough, but without any loss of sound in the corresponding part. This pain ceased on the 19th. There was but little thirst all this time, and the appetite never entirely failed though it was very much impaired. He left the hospital in a very enfeebled condition, not being able to walk even with the aid of crutches.

M. Louis thinks that the phenomena above detailed — and especially the retrograde circulation in the enlarged epigastric veins, prove incontestably that an obstruction had formed in the inferior cava. The

ultimate diminution of these vessels, he thinks, is attributable either to removal of the obstacle in the cava, or to a more deep-seated collateral circulation having been established. We are inclined to agree with the talented physician of La Pitie, and, as the poor man seems to be in no very promising condition of health, it is not improbable that the issue of the case, and the diagnosis of the disease, will be put to the test of *post-mortem* examination. — HEBDOMAIRE.

HOPITAL DES ENFANS.

CLINICAL OBSERVATIONS ON THE DISEASES OF CHILDREN.*

M. GUERSENT, from his official situation, has a wide field of observation open to him, in prosecuting the study of infantile diseases. Like his brethren on the French side of the channel, he has cultivated the department of morbid anatomy with a diligence which does him credit.

M. Guersent observes, that practitioners have considered the diseases of childhood in too exclusive a light. Growth and dentition are the scape goats for all maladies, although children are not exempt from the same morbid processes that seize upon more advanced life, whilst they lay claim to others peculiar to themselves. Affections of the mucous membrane, and the class of ramollissemens are extremely common, and the morbid growths are not unfrequent. Phthisi pulmonalis, says M. G., is more frequent in infancy than at any other time of life; diseases of the circulatory system are rare, excepting, of course, malformations, and practitioners should be aware that the left ventricle is remarkably thick in early life, a circumstance which is often considered as an instance of hypertrophy; apoplexy is uncommon, but M. Guersent has seen a case of apoplexy of the spinal marrow, in a patient affected with diseased cer-

vical vertebrae. He also maintains that many affections must be looked upon as nervous, inasmuch as no organic change is left behind. Children are subject to all kinds of neuralgia, and the genito-urinary system is liable to all the maladies which affect old age, excepting perhaps the chronic inflammation of the mucous membrane. Gangrene of the external parts of generation is frequent in young girls.

The diagnosis of infantile diseases presents many points of difficulty and doubt. The general sonorousness of the thorax, which even remains when the lungs are hepatized, may, if not understood, be productive of serious mistakes. Diseases steal on in the most insidious manner, pneumonia being ushered in with cephalic symptoms, and what appears to be a slight enteritis ending in the most alarming cerebral affection.

MEMBRANOUS INFLAMMATION OF THE CHEEK.

This affection is particularly described by M. Guersent; it differs from the gangrenaritis in being a much milder disease. It is more frequent in infancy than in adult age, on the right side of the mouth than the left. In the onset the mucous membrane of the cheek appears a little swollen, and beneath the epidermis there form little membranous patches, which run into one another, and spread over the cheek, the gums, the tongue, and the neighbouring parts. The glands of the neck are more or less enlarged, but as yet there is no ulceration of the cheek. In the second stage the cervical glands are more swollen, the face is tumid, the breath fetid, the layers of false membrane become detached and assume a greyish colour, and a copious sero-sanguineous discharge adds to the miseries of the little patient. There is usually little fever, the pain varies in different subjects, the salivary secretion is abundant. In the third stage the disease proceeds more slowly, and may terminate either in gangrene or in resolution. If the latter, the sloughs having come away the denuded surface is surrounded by a reddish areola, which contracts the sore from the circum-

* Journ. Hebdom. No. 91.

ference to the centre, whilst absorption appears to be at work on the border of the membranous exudations. In other instances, when the affected surface is extensive, absorption proceeds in various places, even from the commencement of the malady. The disease may disappear and again return several times in the same individual. When the disease extends to the submucous cellular membrane it is liable to end in gangrene, but this never possesses the malignity nor advances with the rapidity of the true gangrena oris.

The disease is seldom attended with danger; is not, in M. Guersent's opinion, contagious; is chiefly developed in children debilitated by chronic affections, bad food, or hospital air; often follows the small-pox and other eruptive diseases; and appears to depend on a general alteration of the fluids. It seldom passes from the mouth to the pharynx, but one example of this kind was observed two years ago in the practice of M. Jadelot.

With respect to the treatment, topical applications only are important. If much pain is felt and the glands of the neck are considerably enlarged, the employment of leeches is advantageous. A mixture of muriatic acid and honey in equal parts, or made stronger if necessary, is, according to M. Guersent, the best application. He is likewise very partial to the nitrate of silver, taking care not to break it in the infant's mouth. If other diseases coexist with that under consideration, the general treatment must, of course, be adapted to the particular case.

XLIX.

HOPITAL DE MONTPELLIER.

M. DELPECH ON IMPERFORATE OS UTERI.

The following case and accompanying observations are contained in the *Mémoires des Hôpitaux du Midi*, for March of the present year.

Case. Margaret G. *ætatis* 22, was brought by her parents to M. Delpech. She was much emaciated, and extremely feeble; complained of thirst, and had some pyrexia. In the hypogastric region was a rounded, moveable tumour, painful to the touch, and rising to about the level of the umbilicus; it created most uneasiness at the monthly periods, when it seemed to increase in volume, and fits of hysteria came on; its pressure on the bladder frequently impeded the flow of urine, and occasioned a fallacious desire of micturition. On examination per vaginam a projection was felt, which was clearly a portion of the tumour, and it was also distinguished by the finger in the rectum; at the bottom of the vagina, as well as in the hypogastrium, fluctuation could be felt with some attention, but no trace of the neck of the uterus or os tincæ existed. The patient had never menstruated.

When young she had enjoyed good health, and even possessed considerable muscular strength. The preceding symptoms had been coming on for the last six years, and on two occasions she had been attacked with violent pain in the belly, attended with serious fever.

M. Delpech had no doubt that the tumour was produced by retention of the menses in the uterus, and increased growth of the latter. After trying various means without success, the surgeon determined to open into the uterus and evacuate its contents. He procured a trocar seven inches in length and five lines in diameter, slightly and uniformly curved, and its canula perforated with several lateral openings in the upper third.

The patient being placed as in the operation for lithotomy, pressure was made on the hypogastric tumour, in order to render the vaginal portion more prominent and fixed. The fore and middle fingers were then introduced into the vagina, and made to touch the tumour, whilst the canula carrying an œsophagus bougie was guided along the fingers, until the extremity also touched a favourable part of the tumour. The bougie was then withdrawn, and the trocar introduced through the canula into

tumour. On its withdrawal a pint and a half of brown, inodorous, and oily-looking matter was discharged, when the hypogastric tumour was quickly reduced to half its former size. The same matter continued to flow slowly for some time, but had ceased by the fourth day after the operation. A moderate mucous secretion followed, the volume of the tumour still farther decreased, and although much induration remained, there was no irregularity to be discovered. On the twentieth day after the performance of the operation the menses appeared, and lasted for six days. Pains in the hypogastrium and a paroxysm of hysteria succeeded, but these appeared to be rather the force of habit, than dependent on any existing disease. In another month the menses flowed again, and the uterus was now no larger than it commonly is three months after parturition.

M. Delpech remarks that much difference exists between the obstruction of the os uteri from inflammation, and the congenital imperforation. According to the Professor there is infinitely more difficulty in keeping the opening pervious in the former than in the latter, and more danger also in performing the operation. M. Delpech mentions the best mode of ascertaining a collection of fluid in the enlarged uterus, which consists in introducing two fingers of the left hand into the vagina, and resting them on the portion of the tumour which projects there, whilst the right hand is laid on the hypogastrium. Between the two fluctuation may be discerned. The Professor might have added, that this mode of examination is well adapted to all uterine tumours of any degree of magnitude. Poising the os uteri on the fingers of one hand the hypogastric tumour is pressed down with the other, which furnishes a very useful method of examination.

M. Delpech observes that the best mode of operating is by using a long and large curved trocar, introduced in the line of the pelvic axis, and by not allowing all the fluid to escape by the canula at first. A certain quantity remaining behind, continues to flow gradually through the opening and ob-

viates the necessity of a tent or other dilating medium. The point to be perforated should be the most dependent. In support of these statements, M. Delpech remarks that the operation of puncturing for imperforate anus almost always succeeds without any further measures to maintain the opening. Is this so universally the case? At all events, M. Delpech protests against the use of tents or bougies after this operation, condemning them as not only unnecessary but pernicious. In the obstruction of the os uteri from inflammation, it is best to use a speculum, and make a crucial opening with a bistoury. The edges of the opening should be removed with the same instrument, in order that there may be a loss of substance, instead of a simple puncture, which is all that is necessary in the congenital imperforation.

Such are the opinions of M. Delpech. Practitioners see so few of these cases that the experience of the Professor is more valuable on this, than on ordinary points. We think, and have long thought, that cases of obstructed catamenia are generally treated in too routine a fashion, and that mechanical obstruction in the vagina or os uteri would be oftener found, if more frequently looked for.

L.

LA CHARITE.

I. EXCISION OF A CARIOUS RIB.*

Case. Thomas Evrard, shoemaker, aged 38, was admitted into La Charité on the 23d of March, with a fistulous opening on the right side of the chest, leading down to the fifth rib. The latter, when examined by the probe, felt rough, denuded, and carious. A considerable quantity of puriform matter was discharged from the fistulous opening; the patient was debilitated, thin, and suffered from a troublesome cough, with expectoration of thick mucous sputa; but no positive sign of phthisis pulmonalis was present.

On the 24th of April M. Roux proceed-

* Journ. Hebdomadaire, No. 86.

ed to remove the rib. All the soft parts covering it were included between two semi-elliptical incisions, extending from the border of the axilla to near the sternum, and passing immediately under the mamma. By these incisions and the removal of the integuments included between them, the rib was exposed for the extent of five inches; the limits of the carious portion ascertained, and the latter, four inches in length, cut out by means of the chain saw; another small portion near the sternum presenting a suspicious appearance was also taken away. The pleura costalis adhered as usual to the inferior border of the bone, but above it was thrust inwards by a moderate collection of pus, which had no communication with the pleural cavity. The rib was quite carious, the superior border in particular and the internal surface being rough, deprived of its superficial laminae, and chiefly affected about midway between its two extremities. The wound was simply dressed, and for two or three days the patient appeared to be doing well. Then, however, dyspnoea and symptoms of pleuritis on the right side appeared, and death speedily supervened.

Sectio Cadaveris. The right side of the chest contained a considerable quantity of sero-purulent fluid with some flakes of recent lymph. The fluid was confined to the two lower thirds of the pleural cavity, the upper being closed from old and firm adhesions. The upper part of the lung contained many large and half-softened tubercles, principally situated opposite the second, third, and fourth ribs, which were all carious and broke with the greatest facility. The pleura at this part still continued sound. The apex of both lungs was loaded with tubercles, chiefly of the granular kind; some of them were softened, others were not; there was nothing like a vomica. No disease was discoverable in other organs.

The reporter remarks that he is not aware of the operation having been performed more than once in France, which was by Richerand in 1818. The patient died. Joshua Aymar, a surgeon of Grenoble, twice excised several carious ribs with

success. The first patient was a woman, forty years of age, in whom the eighth and ninth ribs were diseased; the second, a captain, whose fifth, sixth, and seventh were affected. M. Cittadini has more recently published five cases of successful excision of one or more ribs. In all he opened the cavity of the pleura, and one patient nearly died from the admission of air into it. In the present case of M. Roux's, the tubercles of the lungs must undoubtedly be considered as contributing essentially to the unfavourable character of the case, and the fatal pleuritis. At the same time, the result is calculated to point out the uncertainty that must always hang over this operation, and deter practitioners from engaging in it wantonly or without the most cautious deliberation. We have witnessed one unsuccessful attempt at excision of part of a carious rib, complicated, as it turned out, with an opening into the chest. The patient died, but whether from the immediate effects of the operation we cannot positively say.

II. REMOVAL OF GREAT PART OF THE LOWER JAW—IMPROVEMENTS ON THE COMMON OPERATION.

Case. A country woman, ætatis 27, was admitted into La Charité, on the 1st of May, with a knobbed, irregular tumour of the gum and body of the lower jaw on the left side. It was hard in some parts, soft in others, and appeared to embrace both sides of the jaw from the symphysis of the chin to the last molar tooth. The mouth was distorted, the tongue pushed over to the opposite side, deglutition difficult, and the articulation of some words impaired. It had commenced with violent pain in the teeth of the left side, which continued for several years without any permanent amendment. The maxillary tumour had been coming on for two years prior to her admission. On the 8th of May, M. Roux proceeded to remove the diseased portion of the jaw. He began the operation by thrusting the point of a straight bistoury through the cheek, about half an inch below the edge of the lower lip, prolonging the incision as far as

the region of the os hyoides, and carrying it from thence in a curved direction to just below the projection of the left malar bone. A crescentic flap was thus formed, the convexity looking downwards, and the two extremities extending from the chin to the prominence of the cheek. The flap was detached from the subjacent parts by a rapid dissection from below upwards, by which the maxillary bone and the tumour were perfectly exposed. A common saw was then made to work upon the jaw between the right canine tooth and contiguous incisor, and with some little difficulty the bone was cut across. The other division was made a little before the last molar tooth, and beyond the limits of the disease, which was done with the chain saw. The diseased parts were soon dissected out, several small vessels secured, and the integuments brought together by seven separate sutures. All has hitherto done well, and the wound is now nearly healed.

On examining the tumour, it was found to consist of a fibrous mass, alternately reddish and white, enveloping all the portion of bone that had been removed. This had acquired a spongy texture and considerable size, resembling the medullary sarcoma, and communicating at intervals with the dental alveoli, the whole being encased in a thin envelope of firm consistence. The characteristic appearances were particularly well marked at the extremity of the excised bone corresponding to what remained attached to the ramus of the jaw, a circumstance calculated to inspire well founded dreads of the incomplete eradication of the disease. The reporter is of opinion that the disease began in the internal periosteum of the maxilla, and is fungoid and malignant in its nature.

The reporter remarks that M. Roux intends removing the remaining diseased part of the bone at a future opportunity. He thinks that an incision directed obliquely on the ramus will enable the chain saw to work easily and effectually. The reporter also eulogises the idea of not dividing the angle of the lips as is usually done, but beginning the incision below it. The chain saw is not

forgotten in this gentleman's laudatory observations. If the disease was really fungus hæmatodes, we would not give much for the patient's chances of a cure.

III. DISEASE OF THE TESTICLE. CASTRATION.

We are disposed to notice this case, to shew that the French surgeons are yet far behind us, in the diagnosis and treatment of diseases of the testicle, and we believe of malignant tumours in general.

Case. Jacques Byard, ætatis 28, a carpenter, was admitted into La Charité on the 21st of December, 1829, with considerable enlargement of one of the testicles. It was oval in shape; very heavy; about four inches in its long diameter, from above downwards; the skin was tense, shining, unadherent; the cord was unaffected. The disease had been coming on eight months, and was attributed by the patient to a blow. This had been followed by violent pain which disappeared spontaneously, but was succeeded in the course of a week by a little towards the centre of the testicle, and continued to advance. For a month the patient had suffered from lancinating pains, "the almost pathognomonic symptom of cancerous affections."

Now, although the case was to all appearance a very unfavourable one, most well-informed English surgeons would have given the patient the chance, which a moderate mercurial course affords. We may in general, by carefully considering the symptoms and accurately sifting the history, form a tolerably correct opinion on the nature of most cases of diseased testicle. But still a degree of uncertainty must in the majority of instances impend over the diagnosis, and the most experienced surgeons are every now and then deceived. Unless then the malignant character of the affection be indisputable, we hold that it is generally better to submit the individual to a gentle course of mercury, conjoined with sarsaparilla or tonics if the health be bad. By this proceeding we shall seldom do harm, and

occasionally we save a testis which would otherwise have been removed. This we know to be the practice and opinion of the best surgeons in this country.

However, these considerations had no weight on M. Roux, and on the 26th of December he performed castration. Two ligatures were placed upon the cord, which was cut across by means of scissors—the wound was dressed simply—and the patient did well. Our readers will see that in their mode of performing this operation the French are yet behind us. The vessels of the cord are always tied separately here, and Mr. Roux's mode of cutting the cord with scissors, is surely awkward looking, and if we may venture to coin a word, unsurgical. On making a section of the amputated testicle, it was found to consist chiefly of a dense, compact structure, of lardaceous consistence, but reddish and fibrous in appearance. It seemed as if the gland of the testis had become hypertrophied, without preserving everywhere its natural texture. In the centre were scattered some whitish, tubercular-looking masses, of different dimensions. The reporter would be inclined to say that the white matter was of medullary character, but he does not positively affirm it. These statements strengthen our criticisms on the practice of proceeding immediately to the operation. We do not pretend that mercury would have cured this disease; we think it would not. But still we cannot before operation see into a testicle, and where there is a chance, it is, *ceteris paribus*, right to give it.

L.I.

ST. GEORGE'S HOSPITAL.

INJURIES OF THE HEAD.

THERE is scarcely a more interesting subject to the surgeon, whether he be of a purely practical turn, or inclined to indulge in the speculations of physiology, than that of the injuries to which the cranium and its contents are exposed. Like all the other

great points of surgery, it has emerged from the gloom, which the comparative ignorance of the earlier ages of physic threw around its accurate and sober investigation. The labours of Le Dran, of the French Academicians, and particularly of Mr. Pott, were of essential service in pointing out the proper methods of study, and in explaining symptoms which were previously shrouded in darkness and in mystery. The peculiar talents of Mr. Pott substituted, indeed, a fallacious light for the former shadow; but this has been sobered down by the practical and eminent men of our own times, by Abernethy, Cooper, and Brodie. We do not pretend that the knowledge and treatment of injuries of the head have been reduced to rules of unerring certainty, or deny that much difficulty and doubt impend over many of these cases. But we are confident that the treatment is generally based upon rational, consistent, and intelligible principles, and that a great deal has been done, if more remains to do. The road to knowledge in medicine and surgery is only through the medium of cases. The general notices of facts which we find in essays and books, are rather calculated to illustrate doctrinal points, than convey any accurate information in themselves; and, as an able writer has observed, they admit of the bias of theory and the warp of system, with more facility than cases more closely and circumstantially related. Thus we perceive the value of hospital reports. If taken with care and detailed with fidelity, they are calculated to prove beneficial to the public; but if the source is poisoned, if the reporter sin through malice or incompetence, the profession are quaffing, like Darius, not a wholesome beverage, but a foul, muddy, and polluted draught. Under the best of circumstances, errors will creep in, and men who would not willingly deceive, have nevertheless, through the fallacies of the human mind, and the weaknesses that vanquish the wisest, proved the unconscious instruments of deception. This, alone, independent of the prevalent false faith of these days, will always furnish facts in abundance, for theorists to stumble, rogues to cheat, and honest men to grieve.

It must be allowed that written cases, however minutely observed and carefully recorded, afford an inadequate and imperfect representation of what actually occurs in practice. It is a defect inseparable from this method of communicating information, and although it may be partly remedied by the care and attention of the narrator, it can never be altogether obviated. We must take reports, then, for what they are worth, and after we have allowed for all their imperfections, enough of good and usefulness remains to render them excellent media for diffusing knowledge.

We shall dedicate the present report to cases of concussion, uncombined with perceptible fracture.

CONCUSSION.

Perhaps the simple case of injury of the head is that in which a person receives a blow upon the part, is stunned for a short space of time, and after his recovery from the state of insensibility, experiences no farther symptoms of consequence. There is much variation in one particular symptom which has often been alluded to—the non-remembrance of the mode and time in which the accident occurred. An individual suffering what appears to have been a trifling injury will present this loss of memory, whilst another, who has seemingly been hurt more severely, will not. As a general rule, the more acute the injury and the more complete the state of concussion, the more perfect is the oblivion respecting the accident.

Some authors have stated that the pupil is dilated in concussion. It frequently is so, but not always. We have seen it contracted, and it varies in a short space of time in the same individual, being contracted and dilated in the course of a few hours. It is almost always sluggish, but in some few cases it would seem to be little, if at all affected, especially if the patient is recovering from the state of insensibility.

CASE I. *Concussion—Pain in the Head.*

John Nevinton, ætatis 35, admitted July 19th, 1828.

Was knocked down when rather intoxicated, and his head struck the ground. In a quarter of an hour afterwards was admitted in a state of insensibility—pulse low and faint—skin cold—pupils dilated. He had been bled in this condition by a chemist.

In two hours after his admission he was sensible, and able to reply to questions. The pulse had risen to 80, and was full; he complained of pain in the forehead; had no recollection of the occurrence of the accident. He had house physic, and in the evening, the pulse being fuller and the pain in the head more severe, he was bled to 3xij.

He was relieved by the bleeding, but continued drowsy, although roused without difficulty. The pulse was full and slow. On the 23d there was much uncomfortableness about the head—pulse full, sharp, and remarkably slow—pupils rather sluggish. On the 24th, he complained of dull, aching pain across the brow—the pulse was slow, and presented a trifling irregularity. He was bled to 3xvj. and took salts in infusion of roses. He was relieved. On the 28th he was ordered a little ammonia, but it occasioned more pain in the head, which he compared to the skull “being opened and shut,” accompanied with throbbing in the brow; the pulse was 50, rather vibratory. He was again put on salts and salines; on the 8th, leeches were applied behind the ears; and, on the 11th, a blister was placed behind the left. The pain in the head gradually diminished—it subsided; and on the 18th of August he was discharged cured.

CASE 2. *Concussion—puffy Tumour of Scalp simulating depressed Bone.*

Eliza Macpherson, ætat. 5, admitted Dec. 16th, 1828, under Mr. Brodie.

This little girl experienced a fall upon her head on the 8th of December, by which she was stunned, and after which she vomited. She then recovered her senses, and was brought to the hospital on the 16th on account of a swelling of the scalp, which the surgeon told the mother would require at least half a dozen incisions.

This formidable tumour requiring such active surgical treatment, was a fluctuating swelling extending over the greater part of the left side of the occiput, without any pain in the part or in the head, without any redness of the skin or marks of inflammation in the cellular membrane, and finally, without a single symptom of general disturbance. It was evidently a case of effusion of blood, remaining fluid beneath the scalp. Near the left sagittal suture was a depression, which might well have been considered as produced by fracture. It depended on effusion into the soft parts around.

The treatment consisted in the application of spirit lotion, and one or two aperient powders. It is needless to say that no incisions were made, and on the 23d the swelling, fluctuation, and appearance of depression were all gone together, and the child was as willing and able to run home as if nothing whatever had happened to her.

CASE 3. Slight Concussion—Puffy Tumour of Scalp.

Joseph Drew, æt. 26, admitted June 12th, 1830, under Mr. Babington.

On the left side of the head, about two inches above the ear, was a circumscribed hard tumefaction, exceeding a crown-piece in circumference, with a soft and boggy kind of depression in the centre—not much tenderness on pressure—no loss of sense—pulse quiet. Fracture of the lower end of the radius.

Had fallen in the morning from a hay-loft, seven or eight feet from the ground. Was stunned for ten minutes, but did not vomit. The case was clearly one of puffy tumour of the scalp.

We need scarcely mention the treatment; suffice it to say, that on the third day the tumour had disappeared.

CASE 4. Severe Concussion—Puffy Tumour of Scalp—Bleeding from the Nose and Mouth.

John Smith, a groom, æt. 23, admitted June 25th, 1830, under Mr. Brodie.

At half past ten o'clock this morning a horse with a gig ran away, and both passed over him. He was stunned for a short time,

and when carried home was immediately bled to nearly a pint, when he vomited. Blood issued from his nose and mouth in considerable quantity.

Half-past 11, a. m. Great ecchymosis about the left eye and left half of forehead—sensation, communicated by the effusion of a depression on the latter—left clavicle broken, with various other bruises. He is partially insensible, but answers questions if long and loudly hollaed to—moans much—surface cool—pulse feeble.

After his admission he vomited two or three ounces of dark blood, and in the evening he vomited some more. His symptoms continued the same.

On the next morning, his pulse having risen he was bled to ̄xij , and one of the cups shewed the usual inflammatory appearances in the blood, but the other did not. The pulse was from 70 to 80, full, the tongue dry and brown in the centre. The pupils were contracted, but contractile—he was constantly moaning—could answer questions when aroused—but did not know where he was, nor how nor where the accident had happened.

Lot. frig. capiti.—H. senna.

On the 27th he was much improved, and the effusion of blood beneath the scalp was less apparent; the peculiar depression was almost gone. He had vomited no more blood. The fracture of the clavicle was attended to, and although he complained for some time of pain in his head, and was very unmanageable, the unfavourable symptoms gradually passed away, the clavicle united with a little riding, and on the 21st of July the patient was discharged from the hospital cured.

CASE 5. Severe Concussion—Inflammation of the Absorbents of the Leg.

Thomas Fox, æt. 11, admitted April 16th, 1830, under Mr. Keate.

One, p. m. Was thrown from a horse at full trot, an hour and a half ago, and is said to have fallen backwards and struck the occiput. Was picked up in a state of insensibility, and has so remained; has vomited several times, and has been bled to ̄viii .

He lies coiled up in bed as if asleep—is unconscious of what is said to him, but shrinks when pinched, and resists all attempts to move him. Pupils neither dilated nor contracted, but sluggish—pulse slow and feeble—respiration natural.

Calomel and black draught.

In the evening he could give peevish answers to questions when sharply put to him, and next morning was more sensible still, asking for the chamber-pot, and complaining of pain in the forehead. Pulse 60, soft, occasionally irregular—pupils sluggish, and more dilated—bowels freely opened.

II. senna. Hirud. x. ponè aures. II. sul. c. vin. ant. t. M. xv., mag. sulph. 3j. 6tis hor.

On the 28th there was little change; the pulse was 56. On the 29th he lay like a child with hydrocephalus—the pupils were contracted, yet the eyes were open and staring—no stertor—hand often carried to the head—no replies made to questions—pulse ranging from 56 to 60—bowels open under him. Next day he continued in the same state; the pulse was 56, and had been 43 in the morning; herpes had appeared about the lips and chin.

Emp. Canth. nuch. et servetur ope. Ung. Hyd. fort.

On the 1st May he was more sensible, and could put out his tongue, which was moist—pulse 43—motions no longer passed beneath him. He was ordered support in the shape of beef-tea.

In the evening of the 2d, he was feverish and heated, and less sensible. Pulse 56—tongue white, coated—pupils dilated—motions passed in bed. On the next day, being still in the same state, he was bled in the morning to three ozs., and again in the afternoon to five. The mouth was now rather mercurialized; he complained of no pain in the head. The mercurial ointment was omitted.

On the 5th he was tolerably sensible, and excessively peevish—the pupils more active—no pain in the head. A wound on the great toe of the left foot had suppurated, and the absorbents had become inflamed to above the knee. The head symptoms now disappeared very rapidly, and the inflamma-

tion of the absorbents became the object of attention. It was treated with salines, and cal. gr. j. pulv. ipec. c. gr. iij twice daily. On the 11th, the nitrate of silver, in substance, was applied from the knee to near the groin, over the track of the inflamed absorbents. The leg and foot were swollen, red, and very tender to the touch, the pulse was quick, the tongue red, and the bowels loose. An abscess formed in the cellular membrane of the dorsum of the foot, and was opened—the patient was put upon cinchona—and the abscess over the little toe was evacuated—on the 24th he was convalescent—and on the 2d June he was discharged. He was affected with deafness, which he had not before the accident, but he said that he remembered having been thrown from the horse.

CASE 6. History of Concussion—Anomalous and curious Symptoms referable to the Brain.

James Cook, æt. 14, admitted June 4, 1830, under Mr. Hawkins.

Tensive pain across forehead, with a feeling of great weight there—noise of hammering in the head—heaviness of eyes, preventing his seeing perfectly—vacant aspect—vertigo and giddiness on attempting to stand. On making him attempt to walk, which he cannot do without support, his legs totter under him, crossing each other with the toes turned inwards—disposition to nausea—occasional chilliness succeeded by heat—Pulse somewhat hard and full—tongue white, coated—bowels opened by medicine—urine high-coloured.

Just above and behind right ear, a tenderness on firm pressure, and, perhaps, a little more fulness than natural.

One month ago fell from a low two-story window, and struck his side, and the posterior part of the head, where the tenderness is now. Was stunned for ten minutes, when he recovered. On the next day he had pain in the head and swelling, for which he was bled and cupped; leeches were also applied to the side. He recovered, and weakness only remained. Five days ago

was seized with the pain in the forehead and other symptoms, without any previous rigor. Says he has felt occasional chills and nausea since the occurrence of the accident, and they have not latterly been worse.

V. S. brach. ad 3xij. Hyd. Sub., Pulv. Ant. aa. gr. iij. in pil. ij. stat. H. Senn. Lot. spt.

5th. Pain in head rather relieved—pupils dilated and sluggish, more especially the left—pulse frequent and full—motions dark and offensive.

Hirud. x. fronti. Glacies capiti raso. Ene-ma Olei ricini.

On the 6th, he was still better, and the pain in the forehead was much diminished. He complained of much tenderness at the back of the right ear, and was perfectly deaf on that side. The pupils were less dilated, but had altered in toto, for the right was now more affected than the left. The pulse had sunk from 112 to 62. He was ordered calomel and jalap, and the ice was discontinued in the evening. On the 7th the left pupil was again the most dilated; he had little pain in the forehead. The purgation was continued, with cold to the head.

On the 8th, a blister was placed on the back of the neck. The medical man who had attended him, stated that the lad had been suffering from pain in the head and oddness of manner for some time previous to the fall—that one of his brothers had died of disease of the brain—and that the accident was of so little consequence, that no mention was made of it to the parents for two days after its occurrence.

On the 10th he was much better, had no pain in the head, and the pupils were more natural. After considerable pain in the right ear, a certain quantity of matter was suddenly discharged from it with relief. He continued to improve, and on the 15th, he could walk much better, although he still reeled and had an unconquerable disposition to cross his legs. Another blister was placed behind the ear, the purgation was continued, and on the 19th, the blister was again repeated, and the surface dressed with mercurial ointment.

On the 26th he complained of headache, and was again blistered. On the 6th July

he could walk by himself with tolerable steadiness; porrigo scutulata had appeared upon the head. This was attacked with the strong acetic acid, and an ointment consisting of unguent. lytt. 3ij., æruginis aris, Oi., cerat. cetacei, 3j. This had no effect on the porrigo, which became established fully, but on the 21st of July, he was so far recovered as to be discharged cured.

He had no pain whatever in the head, nor vertigo; could walk and even run, with only a feeling of stiffness; but had lost the hearing of the right ear.

We find we have not room for some interesting cases of scalp wound, which we hoped to have related; they will form the subject of a future report. The first case detailed in the present one, is a tolerably good sample of the symptoms and progress of concussion. Two bleedings and a blister were sufficient to remove the symptoms and effect a perfect and permanent cure. In this hospital we have rarely or never witnessed those frightful cases of concussion, which the works of some authors would lead us to consider as common. To trust to their descriptions, one would imagine that patients were frequently dying in the first stage, and that the second was one of unmeasured and unmitigated violence, only to be put out, if extinguishable at all, by the abstraction of "immense quantities of blood."* From the character of the writers who have made these statements, it is impossible to imagine that they have attempted to describe more than they have actually witnessed. Perhaps these differences of symptoms may admit of explanation in differences of treatment. Mr. Cooper, and, if we recollect aright, Mr. Abernethy, recommend the exhibition of stimuli in the first stage of concussion, and by a natural consequence increase the excitement of the second. The cases of concussion in which stimulants are required are extremely rare,

* It is wonderful what immense quantities of blood it is necessary to take away in these cases, in order to keep down the symptoms of phrenitis.—Cooper's first lines.

and their administration, when not absolutely necessary, must be injudicious and injurious. Indeed, if one may judge by cases, the profession appear to be of this way of thinking, for again and again we have seen patients admitted in a state of complete collapse who had been already bled from the arm. They were blooded because they were run over. We do not mean to say that this is advisable treatment, but the practice of this hospital is amply sufficient to prove, that in the great majority of cases the patient will recover from the state of depression, without the employment of measures calculated to increase the subsequent reaction.

It is in fact very rare for individuals to die of the first stage of concussion, unless it be complicated with other extensive mischief, as fracture of the skull and laceration of the brain, extravasation, internal hæmorrhage, or so forth. In such cases stimulation will do no good, it may do harm; but, if the patient is in danger of sinking, we must necessarily have recourse to it.

The perusal of the foregoing cases will suggest many reflections to the professional reader, on the symptoms, treatment, and remoter consequences of concussion of the brain. It is certainly a subject of considerable practical interest.

MISCELLANIES.

LII.

NEW MODE OF TREATING RUPTURES OF THE URETHRA.

M. DESRUELLES, surgeon to the Val de Grace, has published in the *Journal des Progrès*, No XVIII, a kind of memoir on lacerations of the urethra. Several cases of rupture of this canal and considerable hæmorrhage in consequence, are related. In one, there being inflammation of the urethra and retention of urine, the employment of the catheter gave rise to such formidable hæmorrhage that the patient was lost. In another the individual was nearly destroyed by bleeding, in consequence of the introduction of the caustic bougie. In a third case acute inflammation of the urethra was followed by rupture, infiltration of urine into the surrounding parts, and death. M. Desruelles remarks that horse exercise is one of the most frequent causes of this accident in persons labouring under chronic inflammation of the urethra, for he has almost always observed it in horsemen. As laceration of the urethra is generally combined with, or dependent on contraction of the canal, M. Desruelles conceives that it is a matter of importance to dilate the strictured part, without interfering with the remainder of

the urethra. He has therefore employed a hollow silver tube, one or two inches in length, and of different diameters, which is introduced into the contracted part, and withdrawn by means of a silken thread attached to one of its extremities. Before its introduction it is necessary to introduce a bougie, in order to learn the requisite size of the tube, and the depth to which it must be passed. The silken thread is then passed through what may be termed a conductor, the tube being thus attached to its extremity. The tube is then pushed before the conductor into the strictured part of the urethra, where it is left, while the conductor is withdrawn. The silken thread being fastened round the penis, or to proper tapes, prevents the tube from slipping farther into the urethra or becoming impacted there. The tube is left in for twenty-four or thirty-six hours. We cannot say we see any great advantage in this complicated manœuvring. It is much more clumsy, and much more difficult than the introduction of a silver catheter, more likely to create irritation, and not a whit more adapted to effect a cure. In the abscess of the perineum, depending on fistulous opening into the urethra and stricture, such a mode of proceeding would in most cases be impracticable,

for it is often impossible, always difficult to introduce the more manageable bougie. Besides, if any accident happened to the silk thread, or if severe inflammation of the urethra and surrounding cellular membrane supervened, it would be but an awkward thing at the best to have a little tube pent up in the inmost recesses of the urethra. However, our readers may form their own opinions on the subject.

LIII.

M. PIORRY'S NEW STETHOSCOPE.

M. PIORRY sets out with the position, that metals will conduct sound sufficiently well to admit of being employed as stethoscopes. Metal will also serve for the pleximeter, or that thin plate attached to the large end of the modern stethoscopes, generally made of ivory, and used for percussion: Having ascertained these facts, M. Piorry determined to apply them to the construction of an instrument, which should be at the same time light and portable. His new stethoscope consists of a tube of copper two lines in diameter and six inches long; the length admitting of being increased to the employer's taste, by fixing a second tube upon the first. The pleximeter should be eight lines in diameter, and of copper also, well polished, rounded and fitting well at the edges. Two lines from a point of its circumference is an opening which screws on one of the ends of the metallic tube. The *opercule* is an inch and a half in breadth, and in its centre is a hole which receives the other end of the cylinder. If the impulsion of the heart, pectoriloquy, bronchophony, or ægophony are to be explored, the flat side of the pleximeter is to be applied to the chest; for the respiration, sounds of the heart, and so forth, we must employ the hollow side. M. Piorry imagines that the great portability of this instrument will render immediate auscultation more generally available than it is at present. For our own parts we think the wooden stethoscopes now in use are by no means incommodious. The shaft is extremely slim, and consists of two separ-

able portions, whilst the ear-piece and ivory pleximeter screw off the stethoscope and fit upon each other.

LIV.

POISONING BY OPIUM AND BELLADONNA,
USED AS AN INJECTION.

MADAME * * * *, æt. 22, had been tormented for some months by a darts eruption on the vulva. Having tried various means without relief, she applied a strong solution of opium and belladonna, which gave her some ease. On the 19th of November, 1829, she determined to use the narcotics in the form of enemata, and mixed a pint of the lotion with sufficient water to make three injections, each containing a scruple of opium and half an ounce of the leaves of belladonna. She took the first at eight o'clock in the evening, and the second and third shortly after the first; all three were returned, and some faeces were discharged. At half past eight she went to bed, feeling rather confused. Her husband, a medical man, found her sleeping soundly at half-past nine, and did not disturb her. At midnight, however, finding her still buried in the deepest slumber, he became alarmed and sent for Dr. Solon. Her face was now extremely pale, the pupils dilated to the utmost, the tongue dry, deglutition difficult, the respirations short and frequent, the pulse small and 130. The limbs were perfectly motionless and the skin insensible to pinching or irritation of any kind. A purgative injection was immediately exhibited, a free bleeding practised from the arm, ten leeches placed behind each ear, sinapisms applied to the thighs and legs, and ether draughts administered by the mouth. At five o'clock next morning, the patient opened her eyes, uttered a few unconnected words, and vomited some bilious matters. In the course of an hour she awoke, as from a painful dream, recollecting nothing of what had occurred. Vision was imperfect, she appeared to see things through a thick veil, and whenever she

closed her eyes her ideas became confused and incoherent. We need not pursue the details, suffice it to say that the lady recovered from all her severe symptoms. The parts, however, to which the sinapisms had been applied, sloughed in consequence of the length of time they had been continued, and many months elapsed before she could walk about. The eruption on the vulva was quite cured by this severe discipline, and the patient subsequently went well through a confinement.

LV.

HEROIC TREATMENT OF HYSTERIA.

Dr. Lucas contributes a case of hysteria which may give us pause, to the Glasgow Medical Journal for August, 1830. His object in communicating the case to our contemporary is rather singular for the candid manner in which it is avowed, for he considers it, he says, the bounden duty of a Scotchman to support, as far as he can, every periodical medical publication emanating from the Scotch press. We had thought that the more liberal and distinguished natives of the land of cakes, had begun to disclaim that selfish and too-national feeling which Dr. Lucas openly expresses.

The subject of the case was a stout single woman, 40 years of age, who was seized, in December last, with a violent hysterical attack. It assumed the form of the most excruciating pains referred to the scrobiculus cordis, the patient perspiring profusely, and uttering dreadful cries. Her pulse was full, strong, and rather hard; the attack had come on quite suddenly. The Doctor bled her to 40 ozs. from as large an orifice as he could make, but without relief. He then gave her, in the course of 20 minutes or less, six drachms of laudanum in warm peppermint water, when she began to eructate, and suddenly exclaimed 'I am quite well.' The laudanum only produced an intoxicating effect, but was followed by some nausea for two or three days. Dr. Lucas purged

her, and gave her an emetic which operated beneficially, but on the third day she was seized with another hysterical paroxysm like the first. Dr. Lucas's friend, imitating his Pythias, gave the woman three large tea-spoons full of laudanum, and three pills of solid opium, each weighing two grains, in the space of ten minutes. The paroxysm was removed, but others continued to recur till a large blister dispersed them for some time. In another paroxysm, Dr. Lucas gave her four drachms of laudanum in the space of 15 minutes, but the cure was produced by tonics and port wine. Now really we think that the treatment was a vast deal too violent, and had the patient been a London fœ. ale, instead of a stout Glasgow lassie, we doubt whether Dr. L. would have witnessed more paroxysms than one. The bleeding was altogether unnecessary, and the doses of laudanum were much too large. We cannot but think it ridiculous to crowd drachm after drachm of powerful medicines into the human stomach, before the first doses can have had sufficient time to produce their effect. Thus, in 15 minutes, Dr. Lucas's friend gave three large tea-spoons full of laudanum and three pills of solid opium. Had he possessed a little patience it is probable that a drachm or two of laudanum given in an ether or camphor draught, would have answered just as well without any of the risk attendant on the ultra treatment. We do not speak on speculation, for we have witnessed quite as violent cases as this of Dr. Lucas's, but never did we see, nor do we ever expect to see, such violent measures required.

LVI.

ANEURISM BY ANASTOMOSIS.—BOTH CAROTIDS TIED.

Dr. Mussey has published another case of this kind in the American Journal of Medical Sciences for February, 1830. The patient was a man 20 years of age, with a large, purple pulsating tumour situated on the vertex of the head, having a sluggish ulcer at its apex, which occasionally bled. The tumour

had existed since infancy, but increased greatly within the last three years. The left temporal artery and vein were much enlarged, and upwards of 20 arterial branches, each as large as a goose-quill, were seen actively pulsating on the scalp and running to the tumour. Dr. Mussey tied the left common carotid without success; on the 12th day he tied the right, and in four weeks the tumour diminished to a third of its original volume. After this it began again to increase, and astringent applications with pressure were had recourse to. On the 22d of November, six weeks from the second operation, Dr. Mussey removed the tumour altogether. This he did by making an incision round it through the soft parts, and then rapidly dissecting away the whole mass from the pericranium. Not more than an inch and a half of the scalp was divided at a time, and firm compression was made upon each lip of the incision while the vessels were secured by ligatures, more than forty of which were applied in making the circuit of the tumour. Notwithstanding these precautions nearly two quarts of blood were lost during the operation, which lasted more than an hour. The patient was faint, and continued so for some time. In eight weeks the wound was nearly healed, but some months elapsed before the cuticle became sufficiently firm. The patient returned to labour upon a farm in March or April, and has since continued most industrious and athletic. This adds another to the list of failures, from treating aneurism by anastomosis by tying the carotid arteries. We have argued the question again and again, and it now only remains to publish these cases from time to time, if surgeons will persist in performing these operations. We do not approve of excision of such large aneurismal tumours. The hæmorrhage in this case was dangerous, and might have been fatal. The ligature is preferable, and although there are few tumours so large as not to admit of it when ingeniously applied, yet even supposing there were such, a part of them might be tied and strangulated at a time. These are mere hints, for we have

not space to enter more fully on the consideration of this very practical subject.

LVII.

APPLICATION OF THE CUPPING-GLASS TO THE EMPTYING OF ABSCESSSES, OR OTHER CAVITIES.

The cupping-glass may be very usefully applied to the above purposes. Our readers are aware that many methods of evacuating large abscesses have been recommended by eminent surgeons. Mr. Abernethy makes a small puncture, carefully squeezes out the pus, and uses every precaution to close the opening. Mr. Brodie is rather disposed to make a larger puncture, and, without any squeezing or kneading whatever, to allow the matter to drain into a fomentation-cloth, taking care to keep the patient in a state of perfect rest. Where many and opposite measures are adopted by men of talent and observation, the result of none is uniformly successful, and we have seen the bad consequences ensue after both the methods to which we have alluded. The fact is this: in many cases of psoas or other abscess, the cellular membrane is very extensively destroyed, the muscles perhaps are eaten away, the bones carious, the constitution bad. Now when such is the mischief, bad consequences *must* follow any plan we can devise, or occur if no operation is attempted; the patient being rather destroyed by the disease than by any operative injury inflicted. But still there are milder cases in which the issue is not necessarily fatal, and in which the judicious evacuation of the abscess will effect a cure. It is certain that if such abscesses be opened in an improper and unskilful manner, if there be much squeezing and kneading and probing, the parietes of the cyst inflame, its contents become putrid, sulphuretted hydrogen gas is locked up, and a train of the most characteristic typhoid symptoms are the consequence. Now we have seen Mr. Brodie employ the cupping-glass with much advantage in the emptying of such abscesses. The pressure made by the atmosphere is equable

and regular, though strong, and there is less danger of air being admitted through the wound than in the ordinary mode of proceeding. The abscess being freely punctured with a lancet, Mr. Brodie immediately puts on a succession of glasses till the matter ceases, or nearly ceases to escape. He then applies a poultice and keeps the patient in the horizontal posture and in bed. About a month ago we saw a little girl with an abscess on the buttock, apparently communicating with the hip-joint, treated in this manner, and not an unfavourable symptom supervened. We do not pretend that bad consequences will never follow this, as they will any other operation in these cases, but they rarely do so, and the plan is in general unattended with inconvenience. The cupping-glass is equally applicable to the evacuation of other large cavities as to abscesses. Mr. Brodie, for instance, employed it in a case of hydatids on the convex surface of the liver, after puncturing the prominent tumour in the hypochondrium. Perhaps these hints may be of service, and we are sure Mr. Brodie will be pleased to see some of the results of his extensive experience and keen observation, made available and useful to his less fortunate brethren.

LVIII.

NEW OPERATION FOR ECTROPION.*

DR. DIEFFENBACH has invented a new method of operating for this inconvenience and deformity. He makes an incision in the skin of the affected eye-lid, parallel to the orbit, and occupying as much as two-thirds of the extent of the lid, but in its middle. Having divided the skin and the cellular tissue, these parts are separated from the tarsal cartilage for some extent, and the tarsal conjunctiva is divided, in a direction parallel to the external wound, and for the same length. The tarsal cartilage and the adherent conjunctiva are then laid hold of by forceps introduced through the incision,

and their posterior surface having been removed, they are drawn through the wound, and retained between its lips by the hare-lip pin and twisted suture. Three to five points of suture are sufficient, commencing in the centre, cold lotions should be afterwards applied, and the first pins may be withdrawn on the third day, the last on the sixth. Most commonly the wound suppurates a little, but provided that the deep parts unite, the cure is not prevented.

We know not whether the operation is difficult, but we should imagine it to be far from simple under certain circumstances. In the ectropium, for instance, from burn, a very common cause of the deformity, the superficial parts of the palpebra are so puckered and contracted, as to diminish considerably the chances of success from any operation. The loose cellular tissue about the palpebræ is peculiarly prone to suppuration, and the residence of pins in it for five or six days, would be very liable to give rise to so much as to destroy all hopes of a cure. Besides the external wound, the application of pin and suture, and the consequent ultimate contraction of the integuments, seem to us adapted to promote ectropium rather than to remedy it. We leave the point to the experiments of surgeons, if they feel disposed to try any.

LIX.

HORNS ON THE HUMAN SUBJECT.

A commission of the Royal Academy of Medicine of Paris has been considering the subject of human horns—we do not mean those with which satirists deck us, but *bonâ fide* genuine horns. The commission have collected from various authors so many as 71 recorded cases; 31 in men, 37 in women, and 3 in young children. In 9 cases they were on the head, in 3 on the forehead, in 12 on the thigh, in 3 on the temple, in 5 on the nose, in 2 on the cheek, in 1 on the jaw, in 4 on the chest, in 4 on the back, in 3 on the penis and glans, in 1 on the ischium, in 2 on the knee and calf, in 1 on the leg, and in 2 on the feet. In a young

* Rust's Magazine. B. 30, H. 3, 1830.

woman whose case is related by Bonnet, horns grew so fast from every part of the body, more particularly the joints, that at thirteen years of age she was covered with them. Some of these productions were twisted like ram's horns, and when any fell off, others grew in their place. A horn two or three inches in length grew from the end of each finger—a formidable appendage, we imagine, to a lady. The commission think, with M. Breschet, that the skin and the mucous membrane are the only textures in the human body that form horns. M. Virey considers them as warts exceedingly enlarged from their being situated so as to receive large vessels, but this is manifestly absurd. We believe that these horny projections very frequently form from the sebaceous glands. These become enlarged, their secretion is locked up within them and becomes indurated, ulceration of the surface of the cyst then takes place, and the contained hard, horny secretion is thrust out through the opening. This at least is not unfrequently the case in the head, and we believe that Sir Everard Home removed such an ornamental projection from the head of an old woman in St. George's Hospital.

LX.

MEDICAL SOCIETY OF PARIS.

A NEW Journal has started in Paris, entitled "MEDICAL TRANSACTIONS," in which are published the transactions of the SOCIÉTÉ DE MÉDECINE of that metropolis, and which promises to be more than usually interesting, by giving a fair and ungarbled account of the *viva voce* discussions in that assembly. The reports, in the present case, are drawn up officially by the secretary of the society—M. Gendrin, and, therefore, the fidelity of them is guaranteed in the most satisfactory manner. They will furnish us with an article from time to time, which we hope will not be found void either of interest or instruction.

I. TREATMENT OF PERIPNEUMONY BY LARGE DOSES OF EMETIC TARTAR.

M. Theulier made a verbal report of the medical constitution of the last quarter of

1829, as observed in the department of the INDRE ET LOIRE, and read before the Medical Society of Tours. The subject of antimony in pulmonic inflammation was broached, and M. Theulier asserted that he had multiplied his observations to a great extent, and could positively affirm that antimony, in large doses, constituted a most important and efficacious remedy for the phlogosis in question. He avers, indeed, that in many cases, where all other means had failed in arresting the progress of the inflammation, and where the lungs or pleura were threatened with fatal disorganization, the tartarite, in large doses, put a stop to the ravages of the disease. There can be no doubt that antimony is a powerful auxiliary to the lancet in pulmonary, as well as in many other inflammations.

II. MYSTERIOUS EXPECTORATION OF PUS—HEPATIC ABSCESS, &c.

A case related to the society by M. Merat occasioned a very warm discussion among the members, and, as usual, drew forth many curious facts and observations. The original case was as follows:—A young lady expectorated twice a day, for a long time, a large quantity of purulent matter, of a very fetid odour. The expectoration occurred early in the morning, and again at two o'clock, p. m. The paroxysm, which generally lasted only a few minutes, was preceded by a sense of suffocation—then came on a slight cough, and a discharge of a tumblerful of pus in a few minutes. The chest was examined with the stethoscope, and it was thought that an excavation existed in the posterior and lower portion of the left lung, but they do not appear to have been very positive as to that point. This young lady had been subject to attacks of this kind for some years, and married, contrary to the advice of M. Merat, at an early age, and became pregnant. She got to the eighth month of utero-gestation, having frequently required venesection. The expectoration of purulent matter ceased, and this lady died in two or three days' illness. On examination, (which was unavoidably confined to the thorax,) no trace of disease could be found in either the lungs or

their coverings. There were no adhesions—no trace, in short, of any malady whatever.

M. Gendrin remarked that, as hepatic abscesses sometimes make their way through the diaphragm, and the matter is evacuated by the trachea, this might be a case of the kind. It is astonishing that, in such a society, no one observed that such a thing was impossible in the present case, where there were no adhesions, nor any breach of structure in the diaphragm, through which the hepatic pus might pass. M. G. related the case of a lady who had suffered for several years from attacks of purulent expectoration, preceded always by engorgement and tumefaction of the right hypochondrium. The matter was ejected by a combination of vomiting and coughing, after which the region of the liver diminished for two or three weeks, when the symptoms were renewed. This female is still living, and has been seen by Recamier, Dubois, and many other eminent physicians of Paris.

M. Sandras conceived it probable that, in M. Merat's case, the puriform matter came from the stomach—the cough and sense of oppression preceding and accompanying the discharge, being no positive proof that the matter came from the lungs. M. Merat himself acknowledged that he now came to a similar conclusion, in which, indeed, we entirely agree. M. Merat declared, however, that the pus, on repeated examinations, was pure, and without the least admixture, apparently, of mucus. Various opinions, supported by cases, were brought forward respecting hepatic abscesses, but these we need not detail.

III. OPERATIONS FOR INTERNAL STRANGULATIONS OF THE INTESTINES.

M. Sanson informed the Society that he had met with five cases of strangulated hernia, presenting circumstances that were worthy of notice. In the first two cases, the patients had reduced their herniæ before they applied to him, but the symptoms of strangulation continued. There was perceptible to the touch a tumour, immediately above the abdominal ring. An operation was performed. It consisted in laying the

ring bare, seizing the tumour in the abdomen, and drawing it into view, when the disentanglement (debridement) of the intestine was readily effected. The patient recovered. The presence, then, of a tumour in the abdomen, after the reduction of a hernia, and the continuance of the symptoms of strangulation, are the signs which should guide the surgeon in the adoption of an operation.

A man was brought to the Hôtel Dieu apparently dying. He had himself reduced a hernia; but all the symptoms continued. Nevertheless, no tumour could be felt in any part of the abdomen. As he was in articulo mortis, it was not judged proper to perform any operation. On examining the exterior of the body after death, M. Sanson and others could not discover any trace of strangulated hernia. Dissection, however, shewed that the tumour constituted by the strangled intestine had receded behind the pubis, instead of remaining above or in the immediate neighbourhood of the ring. A portion of the gut, and also of the epiploon, were gangrened. The fourth case shewed (said M. Sanson) with what caution we should proceed to operate, when the signs and site of strangulation are defective or absent. A man, after a journey, was seized with the symptoms of an internal strangulation. He had constant vomiting, obstinate constipation, inflation, tension, and pain of the abdomen, &c. Stercoraceous matters were at length ejected. This man had had a reducible hernia of long standing, which he had recently put up, and he affirmed that there was nothing unusual in the appearance of the hernia at the time, the truss being applied by him in the usual manner. Warm baths, venesection, and the usual means, produced no relief. A consultation was ordered, and the question of an operation was agitated. The majority decided against the knife. The patient, mean time, continued in the same state till the 15th day from the commencement of the obstruction. A celebrated surgeon was now called in, and after mature consideration, proposed to operate, although no tumour, or other circumstance, indicated the site of the strangulated gut. The operation

was agreed to, and M. Sanson went home to bring the necessary instruments and dressings. When he returned he again carefully examined the abdomen, and found that there was actually less tension and tenderness in the neighbourhood of the ruptured lung than in any other part of the belly. Continuing still the examination, he at length discovered an oblong tumour, deeply seated in the left side of the abdomen, (the hernia was on the right) which appeared to him to be a collection of hardened fæces in the colon. A bougie was introduced into the rectum, but could not be pushed up to any extent, on account of the contracted state of the gut. Oily lavements were then employed, at first without effect, but by perseverance they brought away some soft fæces. A purgative could not be administered by the mouth, on account of the constant vomiting. The surface of a portion of the thigh was denuded by a blister, and thereon was applied some croton oil. The consequence was an abundant evacuation from the bowels, and instant relief of all the symptoms. The operator would have looked rather foolish had he employed the knife in this case, and been permitted to examine the body after death!

The fifth and last case was also that of a man who evinced all the usual signs of strangulation. The hernia was external, and the operation was performed. When the ring and the sac were divided, the enclosed gut presented nothing particular, and M. Sanson returned the bowel, but found great difficulty in this part of the operation. He found the intestine accumulate above the ring, and therefore introduced his finger into the canal, but could feel no obstruction. He perceived, however, that the finger did not penetrate into the cavity of the abdomen. He incised the ring still farther, and then discovered the cause of the accumulation of intestine. Above the ring he found the hernial sac was dilated into a pouch, which communicated with the general cavity of the abdomen by means of a narrow aperture. This aperture was obliged to be enlarged before the complete reduction of the intestine could be effected. M. Gerdy

related to the society a case almost exactly similar, which had occurred in his own practice, and required a similar operation.

IV. CASE OF AN APPARENT ANEURISMAL TUMOUR—HEPATITIS—INSIDIOUS HYDROTHORAX.

M. Merat related the case of a man who was suddenly affected, after a straining exertion in moving some furniture, with a pulsating tumour in the neck, over the course of the carotid artery. Little attention was paid to this swelling till it became painful, when he applied to M. Merat for assistance. The pulsation and the site of the tumour induced M. Merat to conclude that it was an aneurism of the carotid. He advised the application of ice, and under this remedy the tumour diminished in size, and ceased to pulsate; but the patient could not bear the ice, and it was discontinued. The tumour remained stationary for three weeks. M. Dubois examined it, and considered it as aneurismal, but arrested in its progress by the application of the ice. Nevertheless the tumour exhibited a doughy feel, and an irregular circumscription, which induced doubts in the minds of the members of the society, when the patient was presented at a former meeting. Shortly after this the patient evinced signs of acute hepatitis, with an enlargement of the liver below the false ribs. This was attributed to his having taken cold while applying the ice to his neck. The symptoms became more intense—the right hypochondrium swelled, as did that side of the thorax—the respiration became dull in the right lung—the liver was found to descend far below the ribs, and there was excruciating pain extending to the loins. The most active antiphlogistic treatment was employed; but without success. The sense of suffocation increased, and the patient succumbed.

On dissection, by M. Merat and M. Deville, the right side of the chest was found to contain more than eight pints of yellow serum, which had pressed back the lung, and by depressing the diaphragm made the liver to descend below the ribs, and appear enlarged. The pleura shewed no signs of inflammation, and all the thoracic viscera

were sound. The cervical tumour was then examined, and found to consist of a mass of glands, the size of an egg, seated over the arteria innominata, at the origin of the right carotid. The coverings of this tumour were highly injected, and discharged much blood when cut into. It is remarkable that till within eight days of his death this man had been able to pursue his usual avocations out of doors. The cause of the hydrothorax is very mysterious, there being no inflammation of the pleura. The case shows how men may be deceived by the appearance of pulsating tumours in the neck. We can have no doubt that the carotid artery has been tied more than once in this country, without any necessity for such an operation!

LXI.

DOUBLE RACHITOME, FOR OPENING THE SPINAL CANAL.

THE difficulties, or we would rather say delays, experienced in laying bare the medulla spinalis are familiar to us. The consequence is that we are less acquainted with the morbid conditions of this essential portion of the human body, than with those of any other part or parts of it. Our French brethren have laudably attempted to facilitate the operation by the invention of several instruments. We have seen one rachitome in this country; it consists of a sort of very strong chisel, curved in a semi-elliptical form, without any handle standing perpendicular to the blade. The back is very broad, and the mode of using it is to force it through the spinal arches on each side of the spinous ridge by blows of the hammer. We never used it nor saw it used, but we think the common mode by the saw and chisel must be preferable. We find that a M. Tarral has presented to the Royal Academy of Medicine what he calls a "double rachitome," by means of which the vertebral canal can be opened on both sides at once. Each branch of the instrument has a rest, *arrêt*, behind, to prevent the bone being forced down upon the medulla, which not unfrequently occurs; the branches are placed at a distance of eight lines from each

other, a sufficient distance to prevent the medulla being injured in any part of its course; on the handle is a hook to raise the depressed pieces of bone, and the handle itself is placed obliquely with respect to the cutting edge to prevent any injury to the fingers of the operator. The two blades or branches are prevented from slipping by the spinous processes, which fix the instrument. Upwards of twenty spinal columns have been opened by the instrument, always in a very few minutes, and without any injury to the medulla.

Would the size of this instrument be adapted for inspecting children? At all events that would not signify greatly, as the spine in such subjects is examined without difficulty. We think that our own morbid anatomists would do well to procure this instrument, or invent a better if they can.

LXII.

CONVULSIVE EPIDEMIC.

At a sitting of the Academy M. Traunoy read a memoir on a convulsive malady, which has reigned for some time epidemically in the commune of Bray-sur-Somme. At the instance of the Prefect, M. Traunoy was summoned to the scene of action, and there found four females affected with the malady. The first was a girl of 17, and her attacks resembled hysteria; they terminated in a deep sleep, and the patient retained no recollection of what had happened. The second uttered cries resembling the crowing of a cock. The third had a kind of hiccup, imitating the noise of a fox. The fourth cut all kinds of capers, leaping like a carp, climbing along a wall with her head downwards, and so forth. M. Traunoy affirms that it is not unusual for the women in the environs of Amiens to utter cries like those of different animals, and even to interrupt divine service in such a manner that they require to be turned out of the church. M. Traunoy alluded to the epidemic *mewing* observed in a convent by Hecquet, which ceased on the physician's declaring that it would be absolutely necessary to bring in a company of soldiers, to flog the fair sister-

hood round. The thanks of the Academy were voted to M. Trauony for his curious paper.

For our parts we have no doubt that the 'epidemic' was nothing less than that mixture of humbug and hysteria, in which the fair sex occasionally delight to indulge. As for the barkers and pantomimists, and mewers, we protest that M. Hecquet's drum-major and cat-o'-nine tails would prove an infallible specific. If the worthy mayor and M. Trauony, instead of writing proclamations and memoirs, were to call in the assistance of the arm militant, or souse their patients with some bucketsful of cold water, we have no doubt that the candidates for the 'convulsive epidemic' would speedily vanish. These are the means which succeed à merveille in hospital practice, and although young ladies must be treated more tenderly, yet the principle will hold in all, however prudential considerations may modify the practice.

XLIII.

ON THE PHARMACEUTICAL PREPARATION OF THE PRECIPITATED CARBONATE OF IRON. By Mr. THOMAS CLARK.

The last number of our Glasgow contemporary contains a short paper under the above title which we deem it proper to notice. The British Pharmacopœias direct watery solutions of sulphate of iron and subcarbonate of soda to be mixed, and the resulting precipitate to be collected by a filter and dried. The precipitate, at first is white, but soon becomes of a dark green colour, and very bulky in substance. When drained of the water, it is still found to be bulky. Exposed to the air the colour changes to a rusty yellow, the effect of oxygen. A decomposition is produced, according to our author in the following manner.

"The precipitated carbonate of iron consists of carbonic acid combined with the black oxide of iron; which black oxide readily combines with more oxygen forming the red oxide; but as the red oxide cannot, like the black oxide, retain carbonic acid in combination, this acid flies off; so that, in the yellow matter alluded to, an additional dose of oxygen has taken the place before

held by carbonic acid. The yellow colour is owing to the red oxide existing in combination with water, or, (to use the language of modern chemistry,) as a hydrate; and the yellow colour is changed to red whenever we apply so much heat as will drive off the combined water. Then the red oxide of iron, or colcothar of vitriol, alone remains."

The consequence is that what is sold in the shops for precipitated carbonate of iron contains no more than a trace of that substance — and is frequently nothing more than colcothar of vitriol. This colcothar is not less different (Mr. C. observes) from carbonate of iron in its medicinal than in its chemical properties.

"I have seen patients, of different ages and sexes, swallow, for a fortnight, at the rate of half an ounce a-day, of colcothar of vitriol, without producing any apparent effect, except that their stools were coloured by the powder to a reddish hue, indicating that it had passed through the body unaltered; whereas I have seen a healthy man made sick by a dose of a quarter of a drachm of genuine carbonate of iron, and made to pass in consequence dark greenish black stools for two days after; and I have seen similar effects produced on patients who had been unaffected by colcothar of vitriol. The sickness, however, is not produced after the first or second day.

These observations deserve the attention of the profession in these days when carbonate of iron is so much in use. We give the remaining part of the paper in the author's own words.

"From the preceding observations, it is easy to gather, that the two defects to be avoided, are exposure to air and exposure to heat. Both of these defects I propose to avoid, by forming the precipitated carbonate into an electuary, thus—

Take of sulphate of iron and subcarbonate of soda, each eight ounces. Pound each salt, and dissolve them separately in warm water. If necessary filter. Being filtered and cool, mix the solutions in a deep vessel, capable of holding one or two gallons of water, which fill up cold. Stir—let subside—and then decant the clear liquor from the precipitate. Fill up again with water,

and likewise again decant; and repeat this operation two or three times, so as to separate the soluble salts. Next put the precipitate on a filter of cotton or linen cloth, supported by a square frame. When the water has ceased to pass, gather into one hand the edges of the filter, so as to make it a sort of bag, and with the other twist it round from the holding hand downwards, so as to squeeze out the remaining water. The precipitate will now have the appearance of clay, too soft for moulding. With soft sugar and aromatic powder, in suitable proportions, make it into an electuary.

Thus we obtain a carbonate of iron, uniform in its properties, hardly deteriorated by the process it undergoes, and little liable to change by keeping.

The precipitated carbonate of iron, while yet moist, is soluble in carbonic acid. Hence a teaspoonful of the above electuary is soon dissolved in a glass of ginger beer, except the aromatic powder it contains. It may be asked, therefore, whether an eligible medicine might not be obtained as follows:—Having filled a dozen of bottles with ginger beer, divide among them the precipitate from an ounce of sulphate of iron, and an ounce of subcarbonate of soda: then cork and set them aside, as usual, till they be ready. I presume that the production of carbonic acid, by the fermenting process, would go on as usual, and that when drawn in due time, we would find the carbonate of iron entirely dissolved in the ginger beer."

LXIV.

ST. JOHN LONG.

When we closed our remarks on the tragedy of Miss Cashin, at page 528, the inquest had not terminated; but in two days afterwards, the verdict of manslaughter was delivered by a jury of intelligent men, and after an investigation of unparalleled duration and minuteness, in which every kind of irrelevant matter was forced upon the inquisitors by the arts of legal sophistry, and the weakness, (to say the least of it) of the coroner. The storm which Mr. Wakley had to sustain from the defendant's counsel, would have overwhelmed most people of sensibility

and modesty—but, for once, Mr. Adolphus met his match, and more than his match—for, although the subtle advocate, practised and trained in forensic debate, ought to have been well aware that passion is a bad ingredient in argument, yet he repeatedly lost his temper, and with it the whole force of his ratiocination; while his opponent, though harassed with every kind of personal allusion that could irritate the feelings, remained imperturbable, and consequently brought reason and truth to bear with irresistible impulse on the sophistry, and, in many points, the absurdity of his adversary's appeals to the jury. Thus Mr. Adolphus suffered his zeal or his excitement to completely eclipse his judgment, in the attempt to persuade any twelve men who were in their senses, and not under the delusion inspired by charlatanism, that the quack's liniment would only act on unsound parts of the body! Mr. Adolphus was, or appeared to be, blind to the sworn facts that Miss Cashin was in good health before the liniment was applied, and that all the organs of the body were found in a state of the most perfect integrity after death. Here his absurd theory was damned before his eyes, and yet he could not see the contradiction.

Upon the melancholy case itself we shall make no further remarks, as the final adjudication is not yet made. We had some pity for St. John Long, till we learnt the heartless indifference with which he appears to view the horrible catastrophe! That heart, indeed, must be callous, which can reflect on the dire ignorance by which a beautiful young lady was sacrificed—not so much by the original application to the back, as by the reckless neglect of calling in surgical assistance, by which the effects of the burning liniment might have been readily obviated. But we fear that remorse has little to do with the profitable trade of quackery any where. Yet we imagine that the man who knows not how to manage the effects of his remedies, and obstinately persists in maltreating them till death closes the eyes of the deluded victim of ignorance and presumption, cannot sleep easy on his pillow. The still small voice of conscience will break through all the opiates of wealth,

and corrode, unseen by the world, the most marble-hearted candidate for power or pelf.

Owing to the illness and absence of some of the most necessary witnesses, the Grand Jury did not proceed to the finding or ignoring the bill of indictment. It will therefore be six weeks before that preliminary step is taken. Meanwhile, Mr. Long follows his usual avocations, and the Aristocracy of this our enlightened land as firmly believe in the miraculous cures of a broken-down painter, as the disciples of Johannah Southcote believed in the advent of the young Shiloh! And why should not St. John Long extract from the pockets of the credulous fifty or sixty thousand pounds, when Mrs. Stevens sold some calcined egg's shells to Government for £10,000, as an infallible remedy for stone in the bladder?

For the honour of the profession, there is but one GULL (if he be not a DECOR-DUCK) who has come forward to bear witness to the miracles of the painter—Mr. Porter, commonly called Doctor among the Niggers on his estate in Jamaica. It is somewhat suspicious that this Octogenarian has taken up his residence in the house of the Charlatan. This advocate of Long was attended by Dr. Johnson some years ago, and, excepting the effects produced by the advance on Time's list, Dr. J. cannot perceive one particle of improvement in the state of his eyes—and as for the state of his lungs, he will carry chronic bronchitis to the tomb with him, as he has already carried it half his life-time, beneath the burning suns of the Antilles, the blue skies of Italy, and the cloudy atmosphere of Harley Street. Shame on Mr. Porter for abetting the delusions of a quack! There was but one medical man in Europe who would have done so—himself! By the way, why did not St. John Long take his medical decoy-duck to Miss Cashin, when the unfortunate lady's back was in such a dreadful state of excoriation? The ten thousand excoriated backs of slaves, which Surgeon Porter had ample opportunities of seeing in Jamaica, would have enabled him, on this point at least, to have offered his master, some wholesome advice! But—

*Quem Deus vult perdere prius dementit.**

* St. John Long and his friends need not

LXV.

CORONER FOR MIDDLESEX.

THIS energetic contest has ended, after a tremendous expenditure of money—a most exuberant exhibition of zeal on the part of the friends—a display of no mean talent on the part of one of the candidates—and a degree of excitement among the people seldom exceeded by the most contested parliamentary election. We have neither time nor space for a disquisition on the qualifications necessary for the office of coroner. Our own impression is, that a certain amount, both of medical and legal knowledge is necessary—but that the quantum of either need not be very great. We imagine that it would be much easier for the medical man to acquire the requisite modicum of law, than for the lawyer to furnish himself with the proper proportion of physic—and hence, upon the whole, we are inclined to advocate the cause of medical coroners—seeing the small allotment of loaves and fishes which the medical practitioner can expect, beyond the direct drudgery of his own profession. If we could trust to the public—or at least the popular feeling respecting this litigated point, as expressed during the recent election, we might confidently expect that medical coroners would, in future, be elected—at least in Middlesex. But we cannot flatter our brethren that the popular feeling breathed forth so ardently at Clerkenwell, was entirely divested

despair. We think there is great probability of his being acquitted of manslaughter, either by the grand or the petit jury; and, on mature consideration, we are inclined to think, that if the public are not to be enlightened by the disclosures at the coroner's inquest, they would not believe Miss Cashin, if she were to rise from the sculphre! This being the case, a *condemnation* will only increase the zeal of his friends, who will represent the whole affair as a persecution, while an *acquittal* will enable the quack to boast of his triumphs! Mr. Wakley has done his duty manfully, and is deserving of praise for the trouble and expence already incurred—but we doubt whether any farther prosecution of the charlatan will be beneficial to the interests of society.

of politics. Independent of the *medical* party which was actively and zealously employed in furtherance of the medical candidate's interest, the speeches on the hustings by Mr. Wakley himself, made a powerful impression on the popular mind. Arts, manœuvres, and language seem to be allowed at elections, which would not be borne in private life or civil intercourse ; and on these we are not inclined to remark. Certes we cannot approve of all that have been put in force during the late contest. But, from what we have seen of Mr. Wakley's talents for working on the popular mind, we strongly advise him to contest the next Westminster election with Sir Francis Burdett. The impression which has been made on the public, by the recent exposé of the worthy Baronet's common sense, in St. John Long's case, will be an admirable and potent adjuvant to Mr. Wakley, in a popular contest for a seat in parliament. We very much doubt whether Mr. Wakley would not beat out of the field, his friend Mr. Hume, in the event of a vacancy for Middlesex. Should a revolution ever take place in this country (which Heaven avert) we shall be much surprised if Mr. Wakley does not figure conspicuously on the political arena. Few men are better calculated to call forth popular feeling—but whether the effervescence of popular feeling would be governed by reason, and directed to beneficial purposes we have great doubts.

But politics apart, the unsuccessful candidate for coroner, in the vacancy of Mr. Unwin, has a very fair chance of success, in the event of Mr. Stirling's resignation—a

resignation which senectitude, with its concomitant infirmities, out to point out. It is fortunate, in one sense, and unfortunate in another, that AGE, which plucks from us the feathers of early acquirement—saps the energies of our faculties—renders us a wreck on the stream of TIME,—and ultimately plunges us in the gulf of everlasting oblivion, rarely deprives us of the fond idea that we are still possessed of intellectual vigour, however large the “youthful hose” may appear for our “shrunk shanks”—or the “spectacles on nose, and pouch on side,” may indicate the propriety of retiring with, “the lean and slippered pantaloon,” from the gaze and pity—too often the contempt, of those who are rapidly following in the same tract!

LXVI.

REGULATIONS TO BE OBSERVED BY STUDENTS, WHOSE ATTENDANCE ON LECTURES SHALL COMMENCE ON OR AFTER THE 1st OF JANUARY, 1831.*

Every candidate for a certificate to practise as an apothecary, will be required to produce testimonials of having served an apprenticeship† of not less than five years to an apothecary :

Of having attained the full age‡ of 24 years :

Of good moral conduct:§ and,

Of having devoted at least TWO YEARS to an attendance on lectures and hospital practice.

COURSE OF STUDY.

The Candidate must have attended the following Course of Lectures:||

CHEMISTRY :—Two Courses—Each Course consisting of not less than Forty-five Lectures.

MATERIA MEDICA, & THERAPEUTICS : { Two Courses—Each Course consisting of not less than Forty-five Lectures.

* Students who are at present pursuing their medical studies, and those who may begin to attend lectures at the commencement of the next medical session, (viz. October,) will be received as candidates for examination by complying with the regulations heretofore published.

† The apprenticeship must have been served with a person legally qualified to practise as an Apothecary, either by having been in practice prior to or on the first of August, 1815, or by having received a

certificate of his qualification from the Court of Examiners.

‡ As evidence of age, a copy of the baptismal register will be required in every case where it can possibly be procured.

§ A testimonial of moral character from the gentleman to whom the candidate has been an apprentice, will always be more satisfactory than from any other person.

|| The lectures required in each course respectively, must be given on separate days.

- ANATOMY & PHYSIOLOGY: Two Courses: { Of the same extent as required by the Royal
ANATOMICAL DEMONSTRATIONS: Two Courses: { College of Surgeons, London.
- PRINCIPLES & PRACTICE OF MEDICINE, { Two Courses—Each Course consisting of not less than Forty-five Lectures,
to be attended subsequently to the termination of the first Course of Lectures on Chemistry, Materia Medica, and Anatomy and Physiology.
- BOTANY: One Course.
- MIDWIFERY and the DISEASES of { Two Courses: { To be attended during the second year.
WOMEN and CHILDREN: {
FORENSIC MEDICINE: One Course: }

Students are moreover recommended diligently to avail themselves of instruction in *morbid anatomy*.

The candidate must also have attended for *twelve months*, at least, the physician's practice at an hospital containing not less than sixty beds, and where a course of clinical

lectures is given; or for *fifteen months* at an hospital wherein clinical lectures are not given; or for *fifteen months* at a dispensary connected with some medical school recognized by the Court. The whole of such attendance to be *subsequent* to the first year of attendance on lectures.

BIBLIOGRAPHICAL RECORD;

OR,

Works received for Review, from the 25th June to the 25th September, 1830.

1. Report of the Managing Committee of the House of Recovery and Fever Hospital, in Cork Street, Dublin, for one year, ending 4th January, 1830; with the Medical Report annexed. 8vo pp. 112. Dublin, 1830.

2. A Treatise on the Pathology of the Animal Fluids and Solids. Consisting chiefly of a succinct account of the principles of Exclusive Solidism and Exclusive Humoralism, and an inquiry into the Validity of each relatively, illustrated by cases. By W. STOKER, M.D. Dublin. 8vo. stitched, pp. 123, 1830.

3. A Treatise on the Mineral Waters of Harrogate, and its Vicinity. By ADAM HUNTER, M.D., &c. 8vo. pp. 138. 1830.

4. *Traité de Chimie Appliquée aux Arts*. Par M. DUMAS. Tome deuxième. 8vo. pp. 808, 1830. Avec Planches.

5. A Series of Chemical and Medical Tables, forming a Synopsis of Chemistry, Materia Medica, Pharmacy, and Nosology. By JOHN HOGG, Surgeon, and Graduate in Medicine, &c. House-surgeon and Apothecary to the Dispensary of the University of London.

6. Rules and Regulations of the Metropolitan Society of General Practitioners in Medicine and Surgery, instituted May 1, 1830.

7. A concise Treatise on Dislocations and Fractures. Being a Selection from the most approved Foreign and English Surgical Authorities, from the days of Celsus to the present time. Illustrated by 14 Plates; 18mo. pp. 110. London, 1830. Price 4s. 6d.

☞ *A very useful little compilation. We recommend it to our younger brethren desirous of acquiring information on this subject.*

8. An introduction to the Practice of Midwifery. By the late Thomas Denman, M.D. Third American edition, with numerous Notes, Engravings, and Emendations. By J. W. FRANCIS, M.D. New-York, 1829, pp. 776.

☞ *This is a very valuable re-publication of a Stock-book. We shall notice some of the notes in our Periscope.*

9. Appendix to a second edition of a Series of Observations on Strictures, &c. By R. A. STAFFORD. 8vo. pp. 52, 1830.

10. A Treatise on Pulmonary Consumption; its Prevention and Remedy. By JOHN MURRAY. Small 8vo. pp. 156. London, 1830.

11. Practical Remarks on the Nature and Effects of the expressed Oil of the Croton Tiglium, &c. By MICHAEL J. SHORT, M.D. 8vo. pp. 64, sewed. 1830.

12. Table of Vegetable Poisons, illustrated with Coloured Drawings. By G. SPRATT, Surgeon, Fellow of the Medicobotanical Society of London, &c. stitched, 2 Tables and Plates. Wilson, Lond. 1830.

Every useful and ably executed table. We recommend it warmly.

13. Remarks on the Disease called Hydrophobia; Prophylactic and Curative. By JOHN MURRAY, F.S.A. &c. &c. 8vo. pp. 56, Longman, 1830.

14. On Canine Madness; comprising the Post-mortem Appearances, Nature, Origin, and Preventive and Curative Treatment of Rabies in the Dog, and other Domestic Animals; being a Series of Papers published in the "VETERINARIAN," in 1828-9-30. By W. YOUATT, V.S. and F.Z.S., &c. &c. 8vo. sewed, pp.

15. An Account of the Varieties in the Arterial System of the Human Body. By P. H. GREEN, A.B. M.B. Trinity College, Dublin. Octavo, pp. 39; illustrated by Plates, 4s.

Every Anatomist — every Surgeon should possess this little volume. Varieties in the Distribution of Arteries are said to exist once in every eight times. If so—these are somewhat more than exceptions to general rules.

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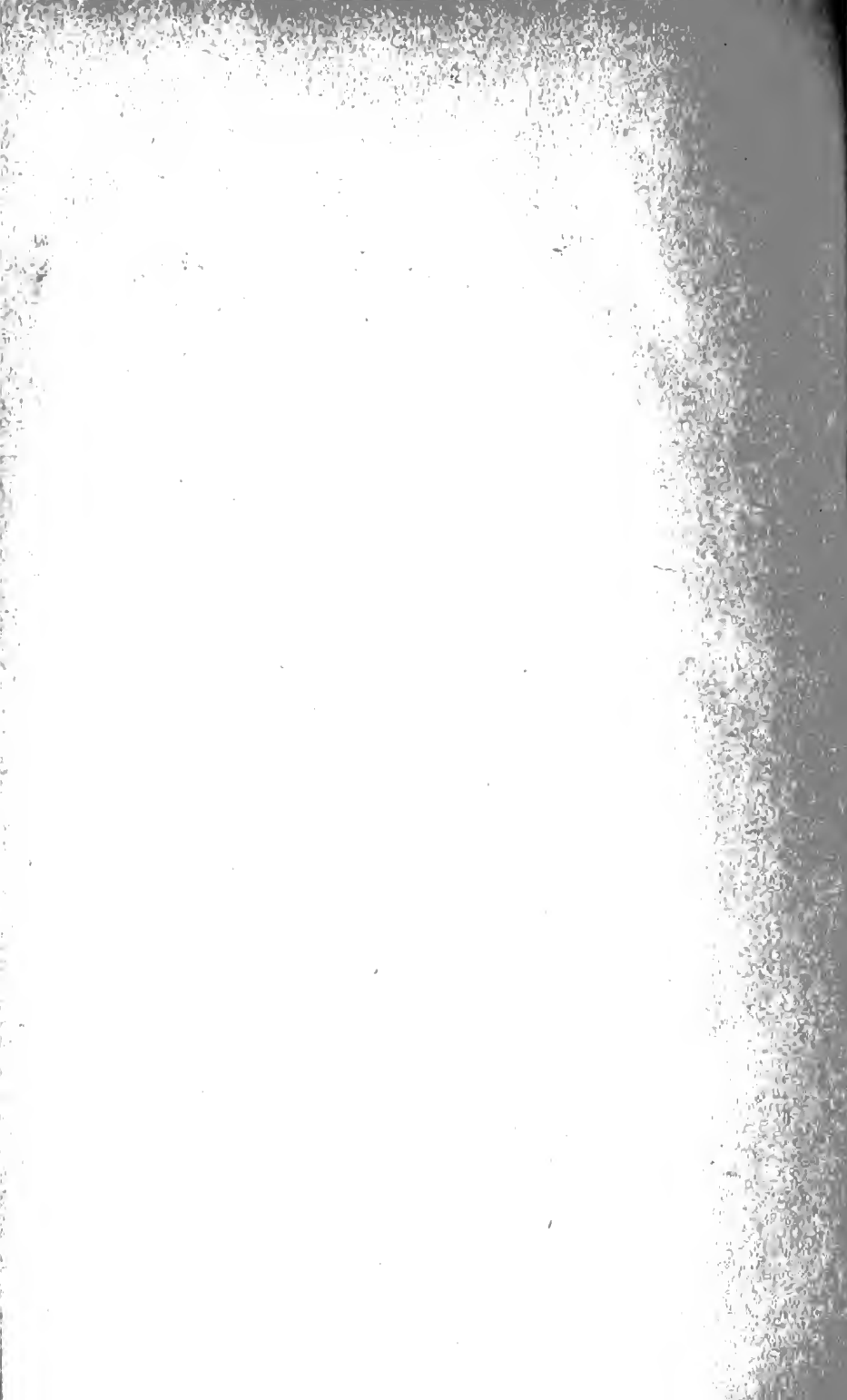
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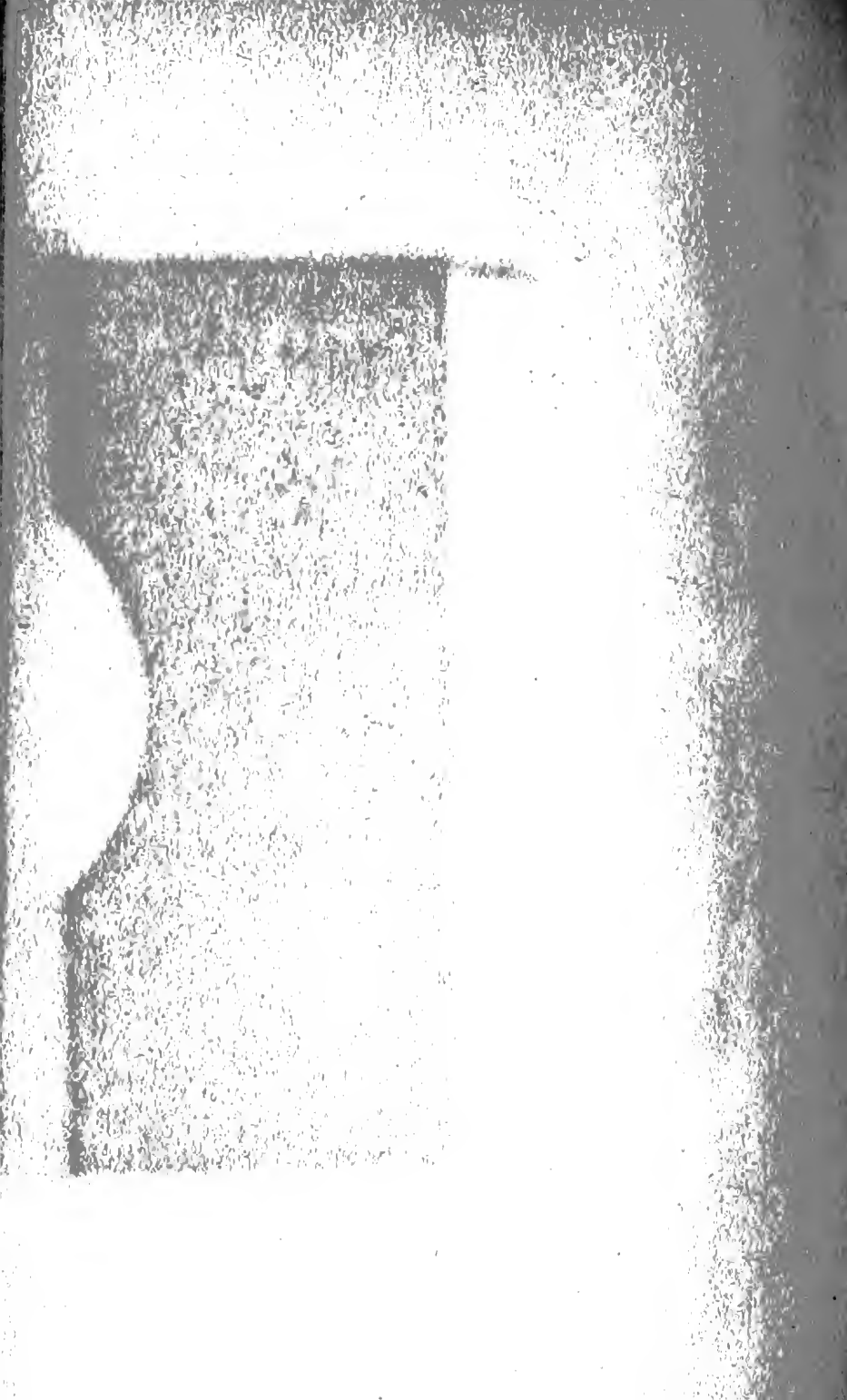
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